



**BALANCED SCORECARD APPROACH TO
HUMAN RESOURCE MANAGEMENT: A
STUDY OF SELECT UNIVERSITIES**

**ABSTRACT
THESIS**

SUBMITTED FOR THE AWARD OF THE DEGREE OF

**Doctor of Philosophy
IN
BUSINESS ADMINISTRATION**

BY

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Balanced Scorecard Approach to Human Resource Management: A study of Select Universities

Abstract

Introduction

Human resources play an important role in development and growth of any organization and for that matter of any economy. Among all the factors of production only human resources are living being and have unlimited capacity and potentials. Such capacity and potentials of human beings can be developed for the benefit of organization by applying proper strategies. More *effective management of human resources (HR) increasingly is being seen as positively affecting performance in organizations, both large and small. It is evident that the transition of HR management has enhanced organizational competitiveness and success. There are different approaches of Human Resource Management and Balance Scorecard is one of the important approaches of evaluation of an organization. (Berg, 1950)*

The BSC provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures. BSC translates mission and strategy into objectives and measures, organized into four different perspectives; financial, customer, internal business process, and learning and growth. The scorecard provides a framework, a language, to communicate mission and strategy; it uses measurement to inform employees about the drivers of current and future success. A lot of people think of measurement as a tool to control behavior

and to evaluate past performance. However the BSC should be used in a different way – to articulate the strategy of the business, to communicate the strategy of the business, and to help align individual, organizational, and cross-departmental initiatives to achieve a common goal. The BSC should be used as a communication, informing, and learning system, not a controlling system. (Kaplan & Norton, 1996)

University is basically responsible for conducting researches and studies at all fields of life and domains of knowledge. University also has an important role in the field of public service in society by offering practical services to society on the part of teaching staff and students, utilizing its various facilities. The most prominent problems which face Jordanian society are: firstly, the continuous cultural and ideological modernization coming from the West and the Palestinians of conflict among three ideologies: Islamic, communist and capital, secondly, the continuous scientific and technologies challenge coming from the west and the east and the needs of the Jordanian society for the different experiences and skills of advanced societies. In this way, the west and the east control the offering of advanced appliances and industries to Jordan according to certain conditions, thirdly, the occurrence of social, economic and political problems resulting from the rapid progress accompanied by an imbalance between the values and aims imposed by the material progress and the host of values and aims polarized the interaction of the ideological heritage and society needs, and fourthly, the development of new intellectual and faith currents within Jordanian society, one of them tries to assert the identity of the Arab-Islamic society, and the other tries to borrow

the western or Eastern solutions resulting from the material progress. Each of them has its philosophy which supports its positions and manner of treatment.

Research problems

In light of the above discussed information gap, the purpose of this thesis is to determine the impact a Balanced Scorecard Decision Support System can have on the success rate of a Balanced Scorecard implementation and work.

For this researcher will answer the following research question:

- How can the utilization of a BSC model increases the success rate of the Balanced Scorecard implementation in HRM?
- Are universities aware of their strategic responsibilities?
- Are universities managing the financial risks or not?
- How is HRM helping universities position themselves to meet the needs of external customers that are students?
- Do the universities have the talent to be successful in the future?
- Is the HR system providing the university with the employee competencies and behavior necessary to achieve overall objectives?
- Whether the internal processing of different procedural work takes much time in completion in government universities than private universities or not?
- .Whether the employees are satisfied or not regarding their promotion as well as their remuneration in government universities?

- How is HRM helping universities position themselves to meet the needs of external customers that are students?
- Are universities aware of their strategic responsibilities?
- Are universities managing their financial resources or not?
- Why are private universities known for their efficiencies as compared to the government universities of Jordan?
- What is the status of performance evaluation of the employees and teachers of the universities of Jordan in the government and private universities?

Research Gap

After thoroughly going through different research works, articles, papers and journals based on Balance Score card approach of Human Resource Management and its implementation in different organisation, The researcher found that a lot of work has been done in regard to the Balance Score card approach of Human resource management in different kind of organisations in different part of the world including USA, UK, Germany, Japan, China, India, Indonesia etc. This approach has been used in different types of organizations in different countries to bring overall efficiency in the working of the organizations.

The researcher came to the conclusion that so far no any work has been under taken in Jordan in regard to make a comparative study of government and Private universities of Jordan as far as implementation of Balance Score Card approach is concerned. So, researcher has confined his work to study

the Balance Score Card approach of Human resource management in selected government and Private universities of Jordan. In this regard two of the government and same number of private universities are selected on the basis of convenience of the researcher to carry out the task.

Objectives of the Study:

- The basic objective of this study is to throw light on the evolution, concept, uses and implementation of the Balanced Scorecard Approach to Human Resource Management.
- To identify the targets and goals against which the universities measure their performance. This includes measures like employee's satisfaction, employee's retention, student's satisfaction, competitive market share, etc.
- To identify the way to make the internal business processes efficient to make universities better.
- To make a comparative analysis of the performances of the staff including teaching as well as non teaching employees of government and private universities of Jordan.
- To highlight different measures required in motivating teaching and non teaching staff members to deliver their best for the welfare of the university.
- To identify and analyze the driving factors behind the implementation of the BSC and what are major problems in its implementation?

- To analyze whether design of the Balanced Score Card (BSC) reflects the resources of a university which provides competitive advantage?
- To analyze whether universities use the resource-related BSC information in their decision-making activities or not?
- To analyze whether there is a positive relationship between universities' use of the resource-related BSC information and their perceived performance in Jordan?

Hypotheses of the Study: To undertake the study of the various aspects of balance score card of private and public universities of Jordanian universities, the following hypotheses are assumed:

Null hypothesis **H₀-1**: There is no significant difference between the public and private universities of Jordan in terms of Balanced Score Card (BSC).

Further this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-1 A**: There is no significant difference between the public and private universities of Jordan in terms of General perspective of Balanced Score Card.

Null hypothesis **H₀-1 B**: There is no significant difference between the public and private universities of Jordan in terms of Financial Perspective.

Null hypothesis **H₀-1 C**: There is no significant difference between the public and private universities of Jordan in terms of Internal Process Perspective.

Null hypothesis **H₀-1 D**: There is no significant difference between the public and private universities of Jordan in terms of Human Resources Perspective.

Null hypothesis **H₀-2**: There is no significant difference in the perception of academicians and non-academicians towards Balanced Score Card.

Further, this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-2 A**: There is no significant difference in the perception of academicians and non-academicians towards General Perspectives.

Null hypothesis **H₀-2 B**: There is no significant difference in the perception of academicians and non-academicians towards Financial Perspectives.

Null hypothesis **H₀-2 C**: There is no significant difference in the perception of academicians and non-academicians towards Internal Process Perspectives.

Null hypothesis **H₀-2 D**: There is no significant difference in the perception of academicians and non-academicians towards Human Resource Perspectives.

Null hypothesis **H₀-3**: There is no significant difference in the perception towards Balanced Score Card on the basis of gender.

Further, the significant difference of this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-3 A**: There is no significant difference in the perception towards Balanced Score Card on the basis of General Perspectives.

Null hypothesis **H₀-3 B**: There is no significant difference in the perception towards Balanced Score Card on the basis of Financial Perspectives.

Null hypothesis **H₀-3 C**: There is no significant difference in the perception towards Balanced Score Card on the basis of Internal Process Perspectives.

Null hypothesis **H₀-3 D**: There is no significant difference in the perception towards Balanced Score Card on the basis of Human Resources Perspectives.

Null hypothesis **H₀-4**: There is no significant difference on the basis of experience towards Balanced Score Card.

Further, this hypothesis is tested from the four different perspectives of Balanced Score Card like general, financial, internal process, and Human resources.

Null hypothesis **H₀-4 A**: There is no significant difference on the basis of experience towards General Perspectives.

Null hypothesis **H₀-4 B**: There is no significant difference on the basis of experience towards Financial Perspectives.

Null hypothesis **H₀-4 C**: There is no significant difference on the basis of experience towards Internal Process Perspectives.

Null hypothesis **H₀-4 D**: There is no significant difference on the basis of experience towards Human Resources Perspectives.

Null hypothesis **H₀-5**: There is no significant association between the Average life cycle of facilities and equipments offered in the universities of Public and Private sector.

Null hypothesis **H₀-6:** There is no significant association between the Average life cycle of facilities and equipments offered in the universities and the sector to they belong.

Null hypothesis **H₀-7:** There is no significant association between average number of papers by academic staff published in a year in the universities and the sector to which they belong.

Null hypothesis **H₀- 8:** There is no significant association between the percentages of International students enrolled in comparison to total number of students in the universities and the sector to which they belong.

Null hypothesis **H₀- 9:** There is no significant association between Conferences/ Seminars/ Workshops organized in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-10:** There is no significant association between the average number of papers by academic staff published in ISI journals in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-11:** There is no significant association between average number of papers by academic staff published in refereed research journals in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-12:** There is no significant association between the number of online programs offered in the universities and the sector to which they belong.

Null hypothesis **H₀-13:** There is no significant association in regard to communication of the implementation of the performance measurement system to the employees of the universities of Public and Private sector.

Null hypothesis **H₀-14**: There is no significant association in regard to deficiencies of performance measurement system in the universities of Public and Private sector.

Null hypothesis **H₀-15**: There is no significant association between academician and non-academician in regard to average number of papers by academic staff published in a year in the universities of Public and Private sector.

Null hypothesis **H₀-16**: There is no significant association between academician and non-academician in regard to average number of papers by academic staff published in refereed research journals per year in the universities of Public and Private sector.

Null hypothesis **H₀-17**: There is no significant association between academician and non-academician in regard to number of online programs offered in the universities of Public and Private sector.

Research Design

Keeping in view the objectives of the research study, the researcher used a descriptive research design.

Sources of Data

The data which constitute the raw material for carrying out the present work have been obtained from a number of sources. The primary and secondary data were collected using the respective sources.

To carry out the undertaken research work, the researcher has heavily relied on primary data by preparing the questionnaire to collect the information from the teaching and non-teaching staff of the government and private universities of Jordan. Different set of questions were prepared to get the required

information from all the segment of the universities like satisfaction level, internal processes, incentives, motivation and facilities in different universities. For collecting primary data, the researcher carried out a pilot survey before conducting the main survey. The pilot study helped to ensure the control of non-sampling error. Primary data was collected, from a sample of 30 academic staff and 30 non-academic staff for pilot study and 288 respondents for main study, from two public and two private universities of Jordan.

Target population

Target population for the purpose of this study is defined as all the academic and non-academic staff two public and two private universities of Jordan.

Sampling units

A two stage sampling was adopted. The first stage sampling units were the four universities of Jordan. The second stage sampling units were individual employees in the academic and non-academic section of the universities.

Selection of the sample

Four universities, two governments and two private, universities of Jordan had been sampled. "For most purposes $n=30$ is sufficient, provided the universe is not exceedingly asymmetrical" (Boyd et. al., 2005). 100 is a medium sized sample and 400 is a larger sample (Boyd et. al., 2005). More than 5% sample size is an appreciable proportion of the sample universe (Boyd et. al., 2005). Estimated population (academic and non-academic staff) of the four universities is not more than 5000. Thus, a minimum sample size of 100 was decided for each plant. This makes $4 \times 100 = 400$ as the total minimum sample size, which is a large sample. This research used convenience sampling and sampled a group of people readily available to the researcher at the time of sampling. This was done as the entire list of the population was not available to the researcher. Hence, random sampling technique could not be employed by the researcher. A quota system was used to select at least 100 employees

from each university and to select approximately equal number of employees from the academic and non-academic groups respectively.

4.9.5 Research instrument

The process of selection of the research instrument, its reliability & validity and the data analysis process leading to the research findings is discussed subsequently.

Since no standard questionnaire was available, a questionnaire has been designed to carry out this study. After a detailed literature review constructs were identified to study the problem and to develop the questionnaire. Further discussions were carried out with subject experts to crystallize the constructs. These constructs were used to prepare the questionnaire. The questionnaire is divided into two parts. Part A has close ended questions related to general, financial, internal process, and HR perspectives on a Likert scale. The type of questions that was used in this investigation was close ended questions. These types of questions offer advantage. These types of questions force the respondents to choose the response from a number of possible replies. By restricting the answer set, it is easy to calculate statistical data over the whole group or subgroup of participants.

Part B has questions related to academic aspects and demographic variables. The first draft of the questionnaire had 45 close ended questions in part A and 11 questions in part B. At the time of the pilot study, there were 45 items. The items were related to different perspectives- General Perspective, Financial Perspective, Internal Process Perspective and Human Resource Perspective. With the help of factor analysis, the internal validity of the instrument was checked. Items having low factor loadings were removed from the final draft of the instrument. As a result, 45 items were reduced to 30 items. The instrument is Likert response scale to measure responses on an interval of 1 to 5 rating from strongly disagree to strongly agree.

The first draft of the questionnaire was set in English and it was used for pilot testing. During the pilot testing the need was felt to have questionnaire in

Arabic also, as many non-academicians and some academicians were not very much comfortable in giving responses in English. After this, the questionnaire was translated into Arabic and for final data collection both the sets were provided to the respondents.

Reliability and Validity of the Instrument

The instrument used in this research has been developed since no standard questionnaire was available on the particular area of research. Thus before conducting final study, the validity, reliability and generalisation of the instrument has been tested and approved. Thus, the instrument was validated to apply to the Jordanian universities. Measures of variables should have validity and reliability (Cronbach, 1971: Nunally, 1978) in order to draw valid references from the research.

Instrument Validity

Exploratory Factor Analysis (EFA) was performed on the scale to check whether all items load on a single construct. To determine if data are likely to factor well, before proceeding with EFA, Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy and Bartlett's Tests of Sphericity were performed. If KMO is found to be greater than 0.50, then one can proceed with factor analysis (Malhotra, 2005). The KMO values was .836, signaling that data was suitable for factor analysis.

Bartlett's Test of Sphericity measures the presence of correlations among the variables. It provides the statistic probability that the correlation matrix has significant correlation among at least some of variables. Thus, a significant Bartlett's Test of Sphericity is required (Malhotra, 2005). Because $p=0.000$ (its associative probability is less than 0.05) for the scale, we could proceed with factor analysis.

The variance explained by the initial solution, and extracted components for each of the factors are taken out. Some items (seventeen items) showing the loading lower than 0.4 are removed from further calculations- F2, F4, IP3, IP6, IP8, IP11, H1, H5, H6, H8, H10, H13, H14, H17, H20, H23, and

H24. After removing these items, the remaining items were recorded in ascending order for each construct.

Instrument Reliability

All of the Cronbach Alpha's exceeded limit of 0.7 and therefore suggest that the four construct in the scale demonstrate acceptable reliability for survey of Jordanian universities.

Summarized results of Tested Hypotheses: Further, the tested hypotheses are summarized in the following table:

Hypotheses	Accepted/ Rejected
Null hypothesis H₀-1: There is no significant difference between the public and private universities of Jordan in terms of Balance Score Card (BSC).	Rejected
Null hypothesis H₀-1 A: There is no significant difference between the public and private universities of Jordan in terms of General perspectives of Balance Score Card (BSC).	Accepted
Null hypothesis H₀-1 B There is no significant difference between the public and private universities of Jordan in terms of Financial Perspectives.	Accepted
Null hypothesis H₀-1 C: There is no significant difference between the public and private universities of Jordan in terms of Internal Process Perspectives.	Rejected
Null hypothesis H₀-1 D: There is no significant difference between the public and private universities of Jordan in terms of	Rejected

Human Resources Perspectives.	
Null hypothesis H₀-2: There is no significant difference between the academician and non-academician in terms of Balance Score Card (BSC).	Rejected
Null hypothesis H₀-2 A: There is no significant difference between the academician and non-academician in terms of General Perspectives.	Accepted
Null hypothesis H₀-2 B: There is no significant difference between the academician and non-academician in terms of Financial Perspectives.	Rejected
Null hypothesis H₀-2 C: There is no significant difference between the academician and non-academician in terms of Internal Process Perspectives.	Accepted
Null hypothesis H₀-2 D: There is no significant difference between the academician and non-academician in terms of Human Resource Perspectives.	Accepted
Null hypothesis H₀-3: There is no significant difference between the Male and Female in terms of Balance Score Card.	Rejected
Null hypothesis H₀-3 A: There is no significant difference between the Male and Female in terms of General Perspectives.	Accepted
Null hypothesis H₀-3 B: There is no significant difference between the Male and Female in terms of Financial Perspectives.	Accepted
Null hypothesis H₀-3 C: There is no significant difference	Accepted

between the Male and Female in terms of Internal Process Perspectives.	
Null hypothesis H₀-3 D: There is no significant difference between the Male and Female in terms of Human Resources Perspectives.	Accepted
Null hypothesis H₀-4: There is no significant difference among the experience at present designation in terms of Balance Score Card.	Accepted
Null hypothesis H₀-4 A: There is no significant difference among the experience at present designation in terms of General Perspectives.	Accepted
Null hypothesis H₀-4 B: There is no significant difference among the experience at present designation in terms of Financial Perspectives.	Accepted
Null hypothesis H₀-4 C: There is no significant difference among the experience at present designation in terms of Internal Process Perspectives.	Accepted
Null hypothesis H₀-4 D: There is no significant difference among the experience at present designation in terms of Human Resources Perspectives.	Accepted
Null hypothesis H₀-5: There is no significant association between the financial policy of universities and the sector to which they belong.	Rejected
Null hypothesis H₀-6: There is no significant association between the Average life cycle of facilities and equipments offered in the universities the sector to which they belong.	Rejected
Null hypothesis H₀ -7: There is no significant association	Rejected

between averages numbers of papers by academic staff published in a year in the universities the sector to which they belong.	
Null hypothesis H₀-8: There is no significant association between the percentages of International students enrolled in comparison to total number of students in the universities the sector to which they belong.	Rejected
Null hypothesis H₀-9: There is no significant association between the numbers of Conferences/ Seminars/ Workshops organized in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-10: There is no significant association between the average numbers of papers by academic staff published in ISI journals in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-11: There is no significant association between the average numbers of papers by academic staff published in refereed research journals in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-12: There is no significant association between the numbers of online programs offered in the universities the sector to which they belong.	Rejected
Null hypothesis H₀-13: There is no significant association between the communications of the implementation of the performance measurement system to the employees of the universities the sector to which they belong.	Accepted
Null hypothesis H₀-14: There is no significant association between the deficiencies of performance measurement system in the universities the sector to which they belong.	Rejected

Null hypothesis H₀-15: There is no significant association between academicians and non-academicians in regard to average number of papers by academic staff published in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-16: There is no significant association between academicians and non-academicians in regard to average number of papers by academic staff published in refereed research journals per year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-17: There is no significant association between academicians and non-academicians in regard to number of online programs offered in the universities the sector to which they belong.	Accepted

Findings of the Study

After a comprehensive study of public and private sector universities in Jordan with the help of information obtained through questionnaires, the followings are the findings of this research work:

- Most of the students and staff members are not satisfied with the working of the Government universities due to the less caring attitude of the government. On the other hand most of the students and staff members are satisfied with the facilities and infrastructure provided by the private universities of Jordan though the private universities are comparatively costly for the students.

- The internal processing of different procedural work is taking so much time to completion in Government universities. On the other hand private universities of Jordan having better processing thus giving more satisfaction to their students and staff members.
- Employees are not satisfied regarding their promotion as well as their remuneration in Government universities.
- In government universities, there is little consideration given to vision/mission of the universities. Thus, the financial budgets of the department/university are not linked to the department/university's qualitative performance.
- Private sector universities in Jordan are financially sound as compared to Government universities. There is lot of procedural delay in sanctioning the fund to the specific need in the government universities. Thus, the private universities are known for their efficiencies as compared to the Government universities of Jordan.
- The available facilities of the private sector universities in Jordan are better than that of Government universities like latest books, journals, magazines, communication system, adopting modern means of teaching, Electronic mail (e-mail), voice mail, the web, or other technology, human resources information system, training etc.
- There is no performance evaluation of the employees and teachers in government universities. On the other hand, in private sector universities, the management is so much concerned with the quality education by

adopting the performance evaluation method to give incentives to hard working staff members.

- The Government universities in Jordan are providing better opportunities to develop or improve the skills than that of private sector universities by offering faculty development programs, orientation/ refresher courses in academic staff colleges at reasonable cost and by providing the leave facilities. On the other hand such kinds of facilities are missing in private universities of Jordan.
- There is no significant difference between the academicians and non-academicians of public and private universities of Jordan in terms of General Perspectives, Financial Perspectives, Internal Process Perspectives and Human Resource Perspectives of Balance Score Card (BSC).
- There is no significant difference between the Male and Female of public and private universities of Jordan in terms of General Perspectives, Financial Perspectives, Internal Process Perspectives and Human Resource Perspectives of Balance Score Card.
- There is significant difference among the experience at present designation of public and private universities of Jordan in terms of Internal Process Perspectives and Human Resource Perspectives of Balance Score Card but found to be significant difference in regard to General Perspectives and Financial Perspectives of Balance Score Card.

- There is significant association between the financial policy of universities, Average life cycle of facilities and equipments offered average number of papers by academic staff published in a year, percentages of International students enrolled in comparison to total number of students, deficiencies of performance measurement system in the Public and Private sector universities of Jordan. But there is no significant association between Conferences/ Seminars/ Workshops organized in a year, average number of papers by academic staff published in ISI journals, average number of papers by academic staff published in refereed research journals, managerial accounting indicators used in order to assist the University's assessment of customer (students) satisfaction policy, number of online programs offered and communication of the implementation of the performance measurement system to the employees in a year in the universities of Public and Private sector of Jordan.
- The employees have better preference to work in the Government University than private universities of Jordan due to the better remuneration and retirement benefits.

Conclusions

The present research on the comparative study of Balance Score card in government and private universities of Jordan explored many issues in line with the objectives set for the study. The present study has focused on many dimensions of balance score card in the education system of Jordan. On the basis of primary data, a number of aspects of balance score card were

analyzed. But still I feel that a multi directional expansion with focus on related areas is possible. In the context of limitations of the study, and the experience gained during the study, some of the potential areas are identified for future researches. Potential areas for research have been identified. On the basis of collected information with the help of questionnaires, the data have been tested by using suitable statistical tools. The hypotheses which have been accepted or rejected have also been summerised in the form of the table. The summary of conclusions, findings and recommendations etc. have been given in the next chapter along with the scope for further research in this field.



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January 31, 2010

CERTIFICATE

This is to certify that the thesis entitled **"Balanced Scorecard Approach to Human Resource Management: A Study of Select Universities"** has been completed by **Mr. Mohammed Abdul Razzaq S. Abu Rumman** under my supervision and guidance.

It is further certified that to the best of my knowledge and belief the work done by Mr. Abu Rumman is original and the thesis has not been submitted to any other university/ institution for the award of any degree or diploma.

After being satisfied with his work I have allowed Mr. Abu Ramman to submit the thesis to Department of Business Administration, Faculty of Management Studies and Research, AMU for the award of the Degree of Doctor of Philosophy in Business Administration.

(Dr. Ayesha Farooq)

Lecturer,

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DECLARATION

I do hereby declare that the thesis title “**Balanced Scorecard Approach to Human Resource Management : A Study of Select Universities**” submitted to the Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh, India, for the degree of **Doctor of Philosophy in Business Administration**, is a record of original work done by me and to the best of my knowledge has not previously formed the basis for the award of any degree, diploma, associateship, fellowship to any candidate of any university in India or abroad.



Place: Aligarh

Mohammed Abdul Razzaq S. Abu Rumman

Date: 31st Jan., 2010

الأهداء

﴿ فَوَجَدَا عَبْدًا مِّنْ عِبَادِنَا آتَيْنَاهُ رَحْمَةً مِّنْ عِنْدِنَا وَعَلَّمْنَاهُ مِن لَّدُنَّا عِلْمًا ﴾

الكهف : ٦٥

"إلى من حملتني جيننا" وحمّنتي صيّا" وتحملت
غُرْبتي عنها كثيرا"

أمّي الغالية

وإلى مصباح دربي وشمس نهارِي

أبيّ العزيز

﴿ وَأَخْفِضْ لَهُمَا جَنَاحَ الذُّلِّ مِنَ الرَّحْمَةِ وَقُلْ رَبِّ ارْحَمْهُمَا كَمَا رَبَّيَّنِي صَغِيرًا ﴾

الإسراء : ٢٤

والتي إخوتتي الاعزاء

أهديكم ثمرة جهدي

محمد عبدالرزاق سلامه أبورمان

Dedicated

To

My Beloved Parents,

Brothers and Sisters

ACKNOWLEDGEMENTS

In the name of Allah, most compassionate, most Merciful, who has created the universe and human beings, and made them realize whatever they desire with His consent and love. He is omnipotent, omnipresent and omniscient.

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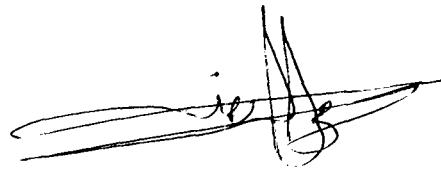
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A handwritten signature in black ink, appearing to read 'Mohammed Abdul Razzaq S. Abu Rumman', with a long horizontal stroke extending to the right.

Date: January 31, 2010

Mohammed Abdul Razzaq S. Abu Rumman

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Preface

Human resource Management is basically related with acquiring and sharpening the abilities and skills of the human beings working in any organization. The evolution of the Balanced Scorecard idea began with the injunction that managers ought to measure more than financial results. Kaplan and Norton proposed a matrix with four types of measures: financial, internal (process), innovation and learning, and customer. Initial work focused on how managers might identify the best measures in each of the four areas and how they might communicate them with subordinates. More effective management of human resources (HR) increasingly is being seen as positively affecting performance in organizations, both large and small. It is evident that the transition of HR management has enhanced organizational competitiveness and success.

The BSC provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures. BSC translates mission and strategy into objectives and measures, organized into four different perspectives; financial, customer, internal business process, and learning and growth. The scorecard provides a framework, a language, to communicate mission and strategy; it uses measurement to inform employees about the drivers of current and future success. A lot of people think of measurement as a tool to control behavior and to evaluate past performance. However the BSC should be used in a different way – to articulate the strategy

of the business, to communicate the strategy of the business, and to help align individual, organizational, and cross-departmental initiatives to achieve a common goal. The BSC should be used as a communication, informing, and learning system, not a controlling system.

University is basically responsible for conducting researches and studies at all fields of life and domains of knowledge. University also has an important role in the field of public service in society by offering practical services to society on the part of teaching staff and students, utilizing its various facilities. The work has been undertaken in regard to make a comparative study of government and Private universities of Jordan as far as implementation of Balance Scorecard approach is concerned. So, researcher has confined his work to study the Balance Scorecard approach of Human Resource Management in selected government and Private universities of Jordan. In this regard two of the government and same number of private universities are selected on the basis to carry out the task. The two selected government universities are: (a). The University of Jordan.

(b). Al- Balqa' Applied University (BAU)

On the other hand, two private universities selected for the study are:

(a). University of Petra (UOP)

(b). Al-Ahliyya Amman University

The various aspects of both, Government and private universities are studied, analyzed and compared by collecting the information from employees including teaching and non-teaching community to assess both. Right from infrastructure to perception of the employees in both types of universities are studied to reach a

particular conclusion. The basic objective of this study is to throw light on the evolution, concept, uses and various other aspects of the Balance Scorecard Approach of Human Resource Management in the university system. Again, to identify the target and goals against which the universities will measure its performance like employee's satisfaction, employee's retention, student's satisfaction, competitive market share, etc. comparison with suitable statistical tools have been made.

The thesis is consisted of six chapters. Chapter one and two discuss the concepts of Human Resource Management and Balanced Scorecard respectively. Chapter three gives detailed information about the different universities in Jordan. Chapter four consists of various studies carried out on human resource management and balanced scorecard which ultimately helps in identifying the research gap. This chapter also deals with the research methodology. To undertake the study of the various aspects of balanced scorecard of private and public universities of Jordanian universities, the hypotheses were made to test the significant difference between both types of universities with respect to General, Financial, Internal Process, and Human Resources Perspectives. In chapter five, which consists of the analysis and interpretation these four perspectives were compared on the basis of the sector to which university belongs, academicians and non-academicians, gender, and the experience at present designation. To test the difference, the t-Test and ANOVA have been used. Again, to test the association between the sectors (Public/Private) to which universities belong and average life cycle of the facilities and equipment offered, non-parametric method of testing called Chi-Square has been used. After testing the hypotheses, the table has been prepared to get the clear and bird's eye view of the analyses of the research work. This research work is definitely a source of guidance to other researchers who want to contribute something in the field of Balance Scorecard and its application in different organization. It is followed by chapter six which discusses the summary of conclusions, findings, recommendations, and directions for future research.

List of Abbreviations

BSC	Balanced scorecard
BScol	Balanced Scorecard Collaborative
CEO	Chief Executive Officer
CHRP	Certified Human Resources Professional
EDC	Economic Development Commission
EPES	Enterprise Performance Evaluation System
ERP	Enterprise resource planning
EVA	Economic value added
GDP	Gross domestic product
HM	Higher Management
HR	Human resource(s)
HRD	Human Resources Development
HRDC	Human Resources Development Canada
HRM	Human resource management
IS	Information Systems
IT	Information Technology
KM	Knowledge Management
KSA	Knowledge, Skills, and Abilities
MBO	Management by objectives
N	Number of responses
OB	Organizational behavior
OD	Organizational Development
PM	Performance management
PMM	Performance measurement and management
POS	Point of sale
QM	Quality Management
R&D	Research and development
SD	Standard Deviation
SP	Strategic planning
SPM	Strategic performance management
TQM	Total quality management

CHAPTER- 1

CONCEPTUAL FRAMEWORK OF HUMAN RESOURCE MANAGEMENT

- 1.1 Introduction**
- 1.2 Concept of Human Resource management**
- 1.3 Objectives of Human Resources
Management (HRM)**
- 1.4 Developing Human resource Management
(HRM) strategy**
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(HRIS)**
- 1.11 Organizational Effectiveness**
- 1.12 Conclusion**

CHAPTER- 1

CONCEPTUAL FRAMEWORK OF HUMAN RESOURCE MANAGEMENT

1.1 Introduction

Human resources play an important role in development and growth of any organization and for that matter of any economy. Among all the factors of production only human resources are living being and have unlimited capacity and potentials. Such capacity and potentials of human beings can be developed for the benefit of organization by applying proper strategies. Human beings are not only active factor of production in itself but it also activates other inactive and inert factors of production like money materials, machines and methods. In this present age of globalization survival and growth of any organization depends on the proper development of its human resources. "The human resources are solely responsible for making use of physical and natural resources and for transformation of traditional economies into modern and industrial economies" "The difference in the level of economic development of the countries is largely a reflection of the difference in quality of their human resources. The key element in this proposition is the values, attitudes, general orientation and quality of the people of a country that determine its economic development." (Berg, 1950)

"The term managing human resources encompasses many different ideas. Many times the success of an organization, group, or even nation is dependent on how well a leader is in managing human resources. Some of the more important ideas or characteristics that come to mind are the ability to lead, motivate, and encourage teamwork." (Jayme and Kleiner, 2001)

1.2 Concept of Human Resource management

More effective management of human resources (HR) increasingly is being seen as positively affecting performance in organizations, both large and small. It is

evident that the transition of HR management has enhanced organizational competitiveness and success. (Flynn, 1997)

Human resource Management is basically related with acquiring and sharpening the abilities and skills of the human beings working in any organization. The concept of human resource development has been defined -by economists, social activists, industrialists and other academicians in different ways and through, different angles. In its broader sense HRM is a process of increasing knowledge, skills and capacities of all the people in a given society. In the context of a nation "HRM is a process by which people in various groups are helped to acquired new competence continuously, so as to make them more and more self reliant and simultaneously developed a sense of pride in their country." In economic sense' HRM means accumulation of human capital and its effective utilization for the development of economy. In political terms HRM prepares people for active participation in the political process and from The social and cultural point of views the development of human resources enriches life " As far as industrial organizations are concerned (he I HID is three pronged focusing on people viz. "The Human" aspect where people are seen as having skills, potential and ability to make changes and develop, the "Resource aspect" where individuals arc considered resources rather than problems and the "Development aspect". Where there is an emphasis on discovery and nurturing of their potentials. (Verma, 1988)

According to the institute of personnel management (U.K), "Personnel management is an integral but distinctive part of management, concerned with people at work and their relationship within the enterprise. It seeks to bring together into an effective organization the men and women who staff the enterprise, enabling each to make his/her best contribution to its success, both as a member of a working group and as an individual. It seeks to provide relationships within the enterprise that are conducive both to effective work and human satisfaction".

Scott, Clothier and Spiegel (2004) have defined personnel management as that branch of management which is responsible as a staff basis for concentrating on those aspects of operations which are primarily concerned with the relationship of management to employees and with the development desirable working relationship between employees and employers, and effective modeling human resources as contrasted with physical resources.

Northcott (2005) considers human resources management as an extension of general management, that of promoting and simulating every employee to make his fullest contribution to the purpose of a business". Human resources management is not something that could be separated from the basic managerial function. It is a major component of the broader managerial function and has roots and branches extending throughout and beyond the organization. According to French Wendell, "Personnel management is the recruitment, selection, development, utilization, compensation and motivation of human resources by the organization".

"One concept which has generated considerable interest among management practitioners and researchers since the 1980s is human resource management (HRM). HRM is seen as a new approach in managing the workforce. It is argued that HRM puts the management of the workforce as a mainstream activity in organizations." (Guest, 1987) This enables the integration of the organization's HRM practice with its strategy. The HRM concept is seen as offering a more integrated approach in the management of the workforce than traditional personnel management.

It has been argued that the practice of HRM should lead to a more effective utilization of an organization's workforce and improved performance. It is proposed that effective HRM practice enables the utilization of the workforce as a source of competitive advantage. (Miller, 1989) However, a number of researchers are beginning to question the tenacity of some of the main ideas associated with HRM. (Beaumont, 1992) There is concern that in spite of the

widespread acceptance of HRM, empirical evidence showing its presence and impact on performance is not substantial. (Guest, 1990)

Despite the widespread use of the term, the definition of HRM remains elusive and varied. (Thomason, 1991) Some writers see it as merely a retiling of the term "personnel management". (Brewster and Larsen, 1992) Storey's (Gunnigle and Flood, 1990) discussion on the definition of HRM best summarizes the various meanings given to HRM. He points out that there are four meanings frequently attached to HRM. The first is that HRM is simply just another word for personnel management and is also used to cover other concepts such as employee relations and people management. The second meaning refers to the use of specific personnel management techniques in an integrated manner. In this definition, HRM is seen as the integrated and coherent use of policies and techniques such as selection, performance appraisal, reward and training to enhance organizational performance. (Storey and Sisson, 1993)

The third meaning emphasizes the importance of a business-oriented and business- integrated approach in the management of employees. This definition emphasizes that the way an organization manages its workforce should match the strategy it pursues. The term "strategic HRM" is often used to refer to this strategically oriented HRM practice. The fourth definition goes a step further; besides the importance of integration with strategy, it also emphasizes the use of employee management techniques which seek to develop employee commitment to certain desired outcomes. This emphasis on the integration of HRM practices and policies with strategy has been described as a paradigm shift from a tactical to a strategic orientation. Unlike traditional personnel management which is said to be reactive, short-term and focused on employees at the lower end of the organizational hierarchy, HRM proactively seeks to establish practices and policies which are synergistic across all policy areas in an organization. (Legge 1989) The HRM approach requires that personnel practices and policies be responsive and adaptive to the needs of the organization. (Schuler, 1991)

The terms “Human Resources” may be defined as the total knowledge, skills, creative abilities, talents and aptitudes of an organization’s workforce, as well as the values, attitudes, approaches and beliefs of the individuals involved in the affairs of the organization. It is the sum total or aggregate of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the persons employed in an organization.

Several terms have been used by various management thinkers to represent human resources. These include ‘personnel’, ‘people at work’, ‘manpower’, ‘staff’, and ‘employees’. Whatever may be the term used, the human resources of an organization include all individuals engaged in various organizational activities at different levels. According to Leon C. Megginson, (2005) “From the national point of view, human resources may be defined the knowledge skills, creative abilities, talents and aptitudes obtained in the population; where as from the viewpoint of the individual enterprise, they represent the total of the inherent abilities, acquired knowledge and skills as exemplified in the talents and aptitudes of its employees”.

HRM also considers employees as valued strategic resources and not merely a cost to the organization. (Hendry and Pettigrew, 1986) In HRM, the proper and effective management of employees in an organization is seen as a source of competitive advantage. (Kamoche, 1991) Unlike traditional personnel management, which sees employees as passive components of an organization, HRM views employees as a strategic asset which should be nurtured to maximize the potential of employees. (Kamoche, 1991) Storey (Storey, 1992) notes that one of the developments emerging in the HRM literature in the late 1980s was the concern about addressing what he terms the “dilemmas” in the management of human resources. Essentially, this is reflected in the shift from the tendency to prescribe the “how to” in managing employees to an approach which takes a more contingent view of the form of employee management practices considered suitable for organizations. He cites the work of Schuler as being among those displaying this shift. Prof.

Shanker CS has very rightly observed that "Human Resource Development is a development oriented planning efforts in the personnel area which is basically concerned with the development of human resources in the organization for improving the existing capabilities and acquiring new capabilities for achievement of the corporate and individual goals."

"The Human Resources (HR) function is in an unprecedented position. According to some authors, this function has already experienced many changes. It has adapted to changes occurring in its operating environment, mainly because such changes were slow and, to some extent, foreseeable. The opposite seems to be happening currently however; as the speed at which change is occurring is very rapid and the course the business world is taking is less predictable.

Therefore, HR managers not only have to make mere adaptations but also face organizational transformations. Within such a context, we think survival will only be possible for firms who understand that their HR managers have a primary and not a secondary role in the strategic decision-making process. From a professional point of view, HR managers must gain sufficient relevance within the firm's business policy to enable them to face the organizations' increasingly difficult challenges with managerial-type decisions." (JGasc', Llopis and Gonza'lez, 2004)

Human Resource Management (HRM) is the function within an organization that focuses on recruitment of, management of, and providing direction for the people who work in the organization. Human Resource Management can also be performed by line managers.

Human Resource Management is the organizational function that deals with issues related to people such as compensation, hiring, performance management, organization development, safety, wellness, benefits, employee motivation, communication, administration, and training.

1.3 Objectives of Human Resources Management (HRM)

The job of a human resources manager starts from identifying the staffing requirement of the company. Human resources manager should make sure whether he has to keep full time staffing, hire employees or give contracts. Staffing involves advertising to find the right candidates, interviewing and negotiating. Once the staffing is done normally the employees pass through a period of apprenticeship. It is the duty of the human resources manager to see the development of the selected candidates through his training period and induce him to the right project. Human resource manager' duty does not end here. He has to do routine appraisals and offer promotions and performance incentives. To create and utilize and motivate workforce, the following HRM goals are required to achieve:

- To establish and maintain sound organizational structure and desirable working relationships among all the members of the organization.
- To secure the integration of individual or groups within the organization by co-ordination of the individual and group goals with those of the organization.
- To create facilities and opportunities for individual or group development so as to match it with the growth of the organization.
- To attain an effective utilization of human resources in the achievement of organizational goals.
- To identify and satisfy individual and group needs by providing adequate and equitable wages, incentives, employee benefits and social security and measures for challenging work, prestige, recognition, security, status.
- To maintain high employees morale and sound human relations by sustaining and improving the various conditions and facilities.
- To strengthen and appreciate the human assets continuously by providing training and development programs.
- To consider and contribute to the minimization of socio-economic evils such as unemployment, under-employment, inequalities in the distribution of

income and wealth and to improve the welfare of the society by providing employment opportunities to women and disadvantaged sections of the society.

- To provide an opportunity for expression and voice management.
- To provide fair, acceptable and efficient leadership.
- To provide facilities and conditions of work and creation of favorable atmosphere for maintaining stability of employment.

Management has to create conducive environment and provide necessary prerequisites for the attainment of the personnel management objectives after formulating them.

Modern organizations are knowledge organizations. In the national and global economies, the service sector has become dominant. The number of knowledge organizations has been growing slowly and gradually. As a result, human resources known as “knowledge workers” are employed in such companies. Knowledge worker may be defined as one whose entire job is the accumulation, transfer, validation, analysis and creation of information. Information leads to knowledge which results into wisdom which is ultimately reflected into human and organizational excellence.

According to Maccoby (1988), Knowledge workers are employed and retained by knowledge organizations in general and techno service organizations in particular. Techno service implies the use of systematic knowledge and information communication technology for the benefit of clients and customers. Such knowledge Organizations (KOs) are characterized by flat hierarchy, front line freedom to make decisions, customer satisfaction and flexible work roles. The competence and work values of knowledge workers determine the company's work performance to a very high degree than the traditional organizations. The managers in KOs are required to perform three important roles namely.

1. A facilitating role between the top management and knowledge workers.
2. A mediating role between the clients and the knowledge workers.
3. An integrating role between the knowledge workers.

Different competencies and skills are required to perform each role. The manager has to apply organizational controls and mobilize the resources to perform the first role. To perform the second role, he is required to solve the conflicts between knowledge workers and clients. He has to balance the factors of time, cost and quality in this respect. The manager must create team spirit and manage the innovation process in order to perform the third role effectively and efficiently. High-tech and professional knowledge workers generally resist organizational controls. Hence, they cannot be given a free rein in the interests of the organizations. Their creativity has to be regulated and controlled moderately. They have to be creative within the budget and time table that their organization can afford. "Pleasing the boss" is not so important for the knowledge workers because they are not dependent on their managers for their career progress. It is also easier for them to find another job than for the manager. Implementation of ideas may give rise to conflict between clients and knowledge workers. Knowledge workers are more likely to pursue their own specialization and provide solutions according to their familiar techniques. They may argue that their job is to provide ideas only. It is the duty of the managers in the client system to ensure implementation.

Sometimes, the clients put pressure in terms of cost and time which may lead to compromises in quality and dissatisfaction for the knowledge workers. This acute problem is many times felt by software companies. The software user community continuously puts the development process under extreme time pressure. Then, they are forced to accept product with inferior quality. (Sheth, 2001)

1.4 Developing Human resource Management (HRM) strategy

Faced with rapid change organizations need to develop a more focused and coherent approach to managing people. In just the same way a business requires a marketing or information technology strategy it also requires a human resource or people strategy. In developing such a strategy two critical questions must be addressed. (Barney, Patrick and, Wright, 1998)

- What kinds of people do you need to manage and run your business to meet your strategic business objectives?
- What people programs and initiatives must be designed and implemented to attract, develop and retain staff to compete effectively?

In order to answer these questions four key dimensions of an organization must be addressed. These are:

- **Culture:** the beliefs, values, norms and management style of the organization
- **Organization:** the structure, job roles and reporting lines of the organization
- **People:** the skill levels, staff potential and management capability
- **Human resources systems:** the people focused mechanisms which deliver the strategy - employee selection, communications, training, rewards, career development, etc.

Frequently in managing the people element of their business senior managers will only focus on one or two dimensions and neglect to deal with the others. Typically, companies reorganize their structures to free managers from bureaucracy and drive for more entrepreneurial flair but then fail to adjust their training or reward systems.

When the desired entrepreneurial behavior does not emerge managers frequently look confused at the apparent failure of the changes to deliver results. The fact is that seldom can you focus on only one area. What is required is a

strategic perspective aimed at identifying the relationship between all four dimensions.

If you require an organization which really values quality and service you not only have to retrain staff, you must also review the organization, reward, appraisal and communications systems.

The pay and reward system is a classic problem in this area. Frequently organizations have payment systems which are designed around the volume of output produced. If you then seek to develop a company which emphasizes the product's quality you must change the pay systems. Otherwise you have a contradiction between what the chief executive is saying about quality and what your payment system is encouraging staff to do.

There are seven steps to developing a human resource strategy and the active involvement of senior line managers should be sought throughout the approach

1.5 Steps in developing HRM strategy

For developing the HRM strategy, normally the following steps are involved:

1.5.1 Step 1: Get the 'big picture'

Understand your business strategy.

- Highlight the key driving forces of your business. What are they? E.g. technology, distribution, competition, the markets. (Murrell,1965 and, Grandjean,1969)
- What are the implications of the driving forces for the people side of your business?
- What is the fundamental people contribution to bottom line business performance?

Step 2: Develop a Mission Statement or Statement of Intent that relates to the people side of the business.

Do not be put off by negative reactions to the words or references to idealistic statements - it is the actual process of thinking through the issues in a formal and explicit manner that is important.

- What do your people contribute?

Step 3: Conduct a SWOT analysis of the organization

Focus on the internal strengths and weaknesses of the people side of the business.

- Consider the current skill and capability issues.

Vigorously research the external business and market environment. Highlight the opportunities and threats relating to the people side of the business.

- What impact will/ might they have on business performance?
- Consider skill shortages?
- The impact of new technology on staffing levels?

From this analysis you then need to review the capability of your personnel department. Complete a SWOT analysis of the department - consider in detail the department's current areas of operation, the service levels and competences of your personnel staff.

Step 4: Conduct a detailed human resources analysis

Concentrate on the organization's COPS (culture, organization, people, HR systems)

- Consider: Where you are now? Where do you want to be?
- What gaps exists between the reality of where you are now and where you want to be?

Exhaust your analysis of the four dimensions.

Step 5: Determine critical people issues

Go back to the business strategy and examine it against your SWOT and COPS Analysis

- Identify the critical people issues namely those people issues that you must address. Those have a key impact on the delivery of your business strategy.
- Prioritize the critical people issues. What will happen if you fail to address them?

Remember you are trying to identify where you should be focusing your efforts and resources.

Step 6: Develop consequences and solutions

For each critical issue highlight the options for managerial action generate, elaborate and create - don't go for the obvious. This is an important step as frequently people jump for the known rather than challenge existing assumptions about the way things have been done in the past. Think about the consequences of taking various courses of action.

Consider the mix of HR systems needed to address the issues. Do you need to improve communications, training or pay?

What are the implications for the business and the personnel function?

Once you have worked through the process it should then be possible to translate the action plan into broad objectives. These will need to be broken down into the specialist HR Systems areas of:

- Employee training and development
- Management development
- Organization development
- Performance appraisal
- Employee reward
- Employee selection and recruitment
- Manpower planning
- Communication

Develop your action plan around the critical issues. Set targets and dates for the accomplishment of the key objectives.

Step 7: Implementation and evaluation of the action plans

The ultimate purpose of developing a human resource strategy is to ensure that the objectives set are mutually supportive so that the reward and payment systems are integrated with employee training and career development plans.

There is very little value or benefit in training people only to then frustrate them through a failure to provide ample career and development opportunities. (Summers and Summers, 1997)

1.6 Significance of Human Resource Management

Arthur Lewis observed, “there are great differences in the development between countries which seem to have roughly equal resources, so it is necessary to enquire into the difference in human behavior”. (Arthur, 2005) It is often felt that though the exploitation of international aid plays a prominent role in the growth of modern economies, none of these factors is more significant than efficient and committed manpower. It is in fact, said that all development comes from the human mind.

Modern organizational setting is characterized by constant change relating to environmental factors and human resources. As regards environmental factors, we find changes in the operating organization structure, the network of working procedures, customs or norms and the economic, political and social patterns in which organizations exist. Moreover, there is constant change in human resources – new individuals are being employed with their new ideas and expectations, while the existing work force is constantly changing vis-à-vis ideas, attitudes and values.

This researcher illustrates the general principles by highlighting the different types of human resource models, and points out problems that model builders should consider when they develop new models of this type. Here some of the basic human resource models are discussed

- 1.6.1 Manpower; the process of determining the numbers and types of people necessary to accomplish a given task.
- 1.6.2 Personnel: the process of managing people, either directly by management action or indirectly through incentives that affect behavior, so that an appropriate type of person, as defined by the manpower process, is available to be "assigned" to a given unit.
- 1.6.3 Assignment; the process by matching members of the available pool of personnel to specific jobs.

1.6.4 Training; the process by which a person who has specific skills or attributes is given a new set.

1.7 Human Resource Management Models

With the development of the subject matter Human Resource Management, the number of models has been developed to deal the HR factor efficiently. These models of Human Resource Management are discussed here in brief:

1.7.1 Manpower Model

Manpower requirements models are designed to tell the human resource planner how many of what types of people are needed to produce given levels of output. Models range from large-scale simulation types to statistical models that show the numbers and types of people historically used to accomplish a measured amount of work. Simulation models tend to explore manning situations beyond the range of direct observation. By and large, industrial engineering approaches, which emphasize statistical analysis of workload and manpower actually employed, have gained broad acceptance as the prime tools for determining manpower requirements. (Warner, McCall, and Gotz, 1976)

1.7.2 Personnel Model

The traditional feature of military personnel systems is that it has an "in-at-the-bottom, up-through-the-ranks" structure. These systems are frequently modeled as a Markovian process, where movement through the system is determined by a set of transitional probabilities.* These probabilities are either explicit policies—only a specified percentage of a cohort will be allowed to pass to the next year—or averages of observed behavior over time. In general application today, personnel planners and managers use three kinds of models: steady state, dynamic, and transition. (Doralyn Rossmann, 2005)

1.7.3 Dynamic Model

Dynamic model takes a given, non-equilibrium distribution of personnel and applies a Markovian process to obtain a new personnel profile for a specific period in the future. Thus, though the steady-state/ equilibrium solution is not calendar specific, the results of a dynamic model do change from period to period. In real-world applications, desirable steady-state policy solutions are often rejected when the near-term effects, as determined by applying the policies through a dynamic model, are shown to be unacceptable. An example is the analysis of alternative retirement systems developed by the President's Commission on Military Compensation. The steady-state analysis of alternative systems showed the benefits of proposed changes in the retirement rules. But, applying the new policies to the existing force, as was done in a dynamic analysis, revealed the magnitude of the increases in near-term costs associated with the proposals. The proposals were never adopted.

1.7.4 Transition Models

Transition models have gained importance recently which is goal-linear programming models. They incorporate constraints and objective functions, such as manpower requirements and budget ceilings, and are used to help formulate personnel policies and monitor progress against goals, budgets, and force levels. They are designed to describe the force structure that will come closest to satisfying a given set of manpower requirements given existing personnel constraints. Such applications are useful in the development of "optimal" combinations of policies that deal with a number of real-world constraints simultaneously. (Charnes and, 1961)

1.7.5 Assignment Models

Manpower models are designed to help personnel planners determine the numbers and types of people needed to perform specific tasks. Personnel models are used to predict the likely outcomes of changes in a personnel policy.

Assignment models, by contrast, are designed to match given individuals with given jobs in such a way as to maximize some objective function, subject to a set of constraints. As used today, assignment models are employed in the initial classification and assignment process, as well as the reassignment of individuals. As structured, these models match men and jobs/school seats. They often consider the attributes of assignees, their preferences, and the goals of the Service. (Charnes and Cooper, 1961)

It should be noted that these matches are not optimal over time. A specific match depends on the time that an individual, billet, or school seat is entered into the model, as well as matches performed. The Army recently proposed a multiyear, multimillion-dollar program to expand the present personnel allocation/assignment system and develop a new one that will more than match recruits against the minimum eligibility requirements for job/school seats. Noting the sequential nature of the personnel process, the Army wants to expand its assignment models to be able also to look ahead and answer such questions as these: (a) what is the effect of filling a training seat with a minimally qualified volunteer? (b) What is the "cost" of deliberately leaving a training seat empty? and (c) What is the probability that a more qualified person will become available to fill some specific training seat in the next 24 hours somewhere in the U.S.?

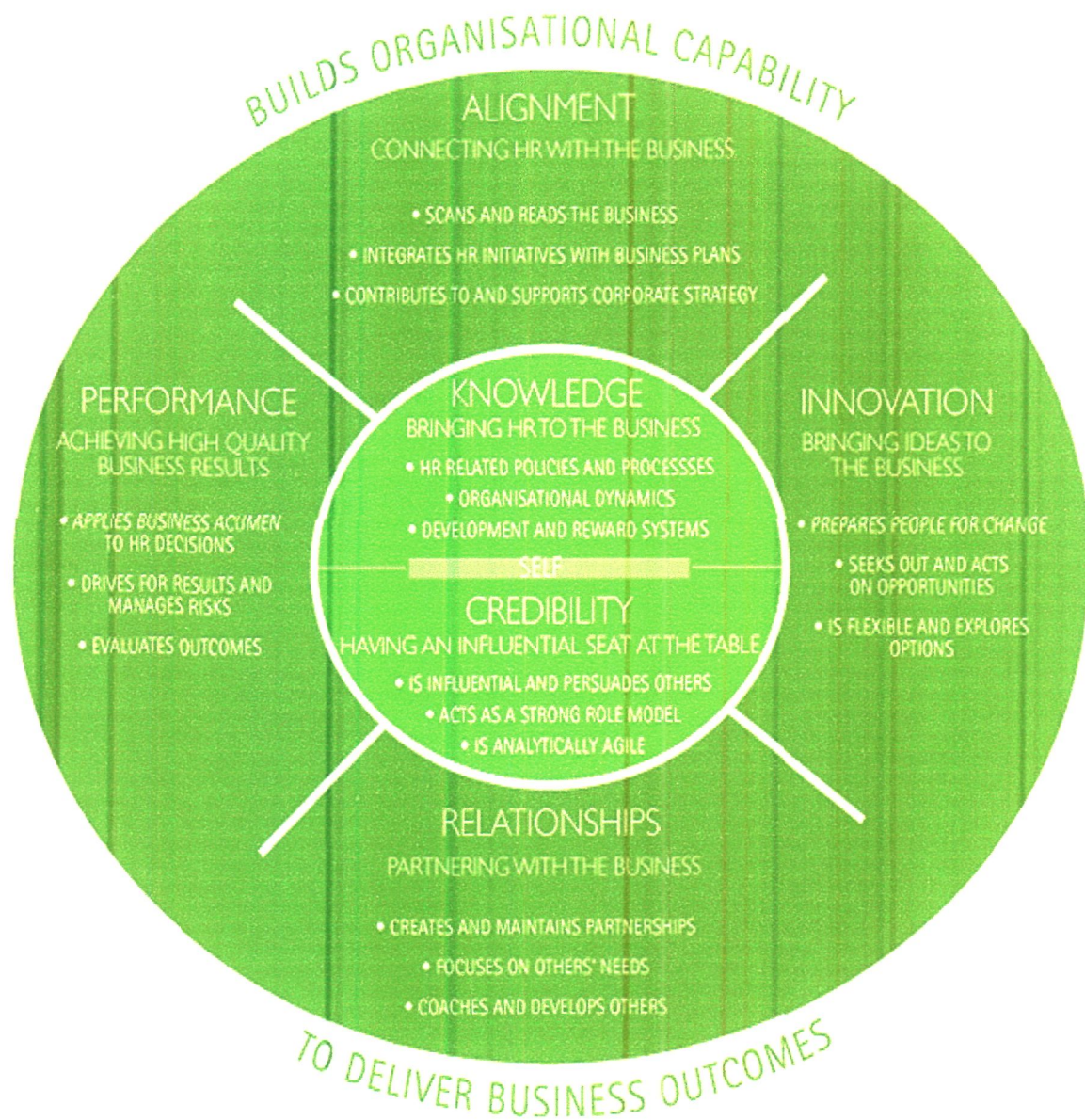
A word of caution for those who develop assignment models: If such models are to be used, they must recognize that their subjects are human, not inanimate, and that people intervene in the assignment process. Many technically elegant models are never used because they are too mechanistic in their approach. Models can help in the assignment process. However, it is not realistic to believe that assignments can be made by computer without human intervention.

1.7.6 Human Resources Capability Model

The model intends to look at the development needs of people working in the HR area with a view to strengthening the capabilities in this area. The Model is

therefore a timely and useful initiative.' 'This model will provide a useful tool in shaping future development activities for HR practitioners in the challenging times ahead. The Model will be particularly useful to the Services as a tool for linking HR more clearly with organizational strategy.

Figure-1.1 Human Resources Capability Model



Source: Lundy O, 1994

The Program is practical in its approach and design with a focus on developing skills that will give HR people greater ability to be effective in strategic HR roles. It helps participants develop the capabilities necessary to understand key

business issues in their agencies and how these issues need to drive HR services and initiatives. HR people have a unique role in their agencies. Working 'at large' across the organization means that they have the opportunity to see and understand challenges being faced across their agencies and assist their agencies in achieving their business outcomes. HR people support the Executive, line managers and staff with HR initiatives designed to get the right people, with the right skills, in the right place at the right time.

The HR Capability Model sets out the skills required of highly effective human resource people, who effect organizational change, build agency capability and strengthen the impact of HR on business outcomes. It can be used by

- HR people to focus on their development needs.
- Agencies to assist in defining the skills required when looking for HR people.
- Agency heads and line managers to see the contribution that HR people can make to business outcomes.

1.7.7 Control Based and Commitment Based HR Model

“For any social group to perform its tasks efficiently and achieve its common objectives, the management of its most important resources - the people - is of utmost importance. Recent thinking has moved from the control-based model to the compliance model. The soft edge of the latter involves eliciting employee commitment and expecting effectiveness and efficiency to follow. The hard edge of the latter involves ridding the organisation of unnecessary layers of middle management which, when stripped of control functions, have very little by way of value added.” (Lundy, 1994)

Table-1.1 The difference between Control-based HRM and Commitment-based HRM

Policy Area	Control-Based HRM	Commitment-based HRM
Job design principles	sub-division of work; specific job responsibility - with accountability ; planning separate from implementation	broader jobs; combined planning and implementation; teams
Management Organisation	top-down control and coordination; hierarchy; status symbols	flat structure; shared goals for coordination and control; status minimized
Compensation	fair day's pay for a fair day's work; job evaluation and appraisal; individual incentives	reinforcing group achievements; pay geared to skill and other contribution criteria; profit sharing
Employee Voice	Unionised (damage control, bargaining); Non unionised (attitude surveys)	mutual mechanisms for communications and participation; mechanisms for giving employee voice on issues
Labour Management Relations	adversarial	mutuality; joint problem-solving and planning
Management Philosophy	the boss dictates; management obligated to stakeholders	fulfilment of employee's needs is a goal rather than an end

Source: Lundy O (1994)

1.7.8 Sub-System Model

A nation with abundance of physical resources will not benefit itself unless human resources make use of them. In fact, human resources are solely responsible for making use of national resources and for the transformation of traditional economies into the modern in industrial economies. Lack of organization of human resources is largely responsible for the backwardness of

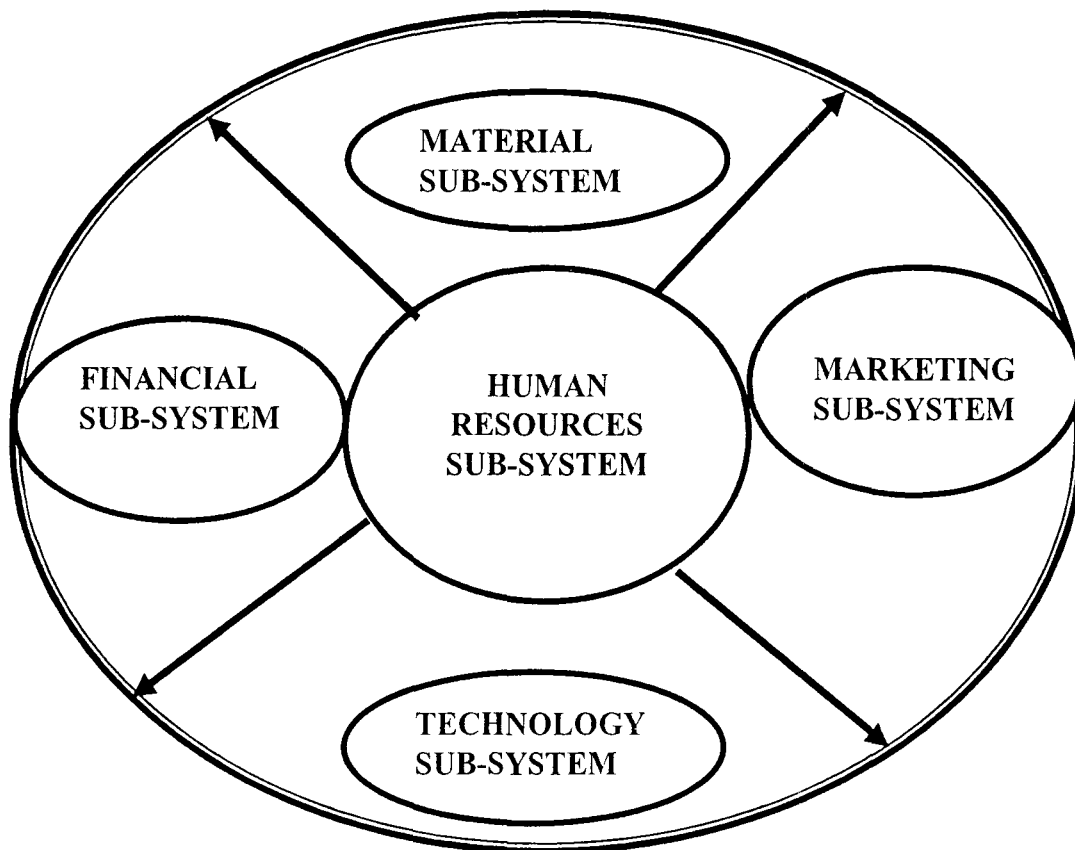
the nation. Countries are underdeveloped because their people are underdeveloped. In essence, "the difference in the level of economic development of the countries is largely a reflection of the differences in quality of their human resources". (Adam, 2003) "The shift from manufacturing to service and the increasing pace of technological changes are making human resources the ingredient to the nation's well-being and growth. And in a service-oriented industry like banks, railways, the quality, quantity and utilization of human resources become all the important". (Myrdal, 2006)

Most of the problems in organizational sections are human and social rather than physical, technical or economic. No industry can be rendered efficient so long as the basic fact remains un-recognized that it is principally human. It is not a mass of machines and technical processes but a magnified nervous system.

Management of an organization in modern economies is not only complex and sophisticated but it is also vital influencing the economic growth of a country. Its efficiency determines the property and well being of the people of the nation. "Perhaps today there is no other latest activity which is as important and dynamic as management – the oldest of arts and newest of profession". One of the fundamental areas is the management of human resources.

Thus, "in the management of four M's – money, materials, machines and men – it is needless to labor the obvious point that, considering the nature of man, the management of men is not only fundamental but also dynamic and challenging." (Rudrabasavaraj, 2005)

Figure-1.2 Human Resources as Central Sub System in an Organization



Source: Rudrabasavaraj M.N. (2005)

One of the fundamental tasks of management is to manage human resources, in the service of the economic objectives of the enterprise. Successful management depends not solely, but significantly upon the ability to predict and control human behavior among other things, if a company is economically successful, it means the management has been able to manage human resources effectively. (McGregor, 2004) The human resources are the active force of industrialization, and the strategies for development should concentrate on their enhancement.

Human resources system in an organization is not only unique sub-system but a principal and central sub-system and it operates upon and controls all other sub-systems. Thus, in the words of Weldell French, "Personnel management is a major pervasive sub-system of all organization". (Drucker, 2006)

Whatever in the environment affects the organization like – economic, social, cultural, legal, political, historic, competitors, consumers, etc., as a whole also affects the personnel system. The human resources system receives inputs from the organization in the form of objectives and it results in individual and organizational performance that may be viewed as individual and organizational output. Both the personnel system and the entire organizations operate under the same cultural, economic, social, legal, political and other constraints.

Hence, greater the effectiveness and productivity of personnel, the more will be the effective functioning of an organization. Drucker (2006) has rightly observed the significance of personnel as “managers are found of repeating the truism that the only real difference between one organization and other is the performance of people. In essence, the survival, development and performance of an organization – although not solely but heavily – depend on the quality of personnel”.

1.8 Nature of Human Resources Management

The term Human Resource Management has been understood in different ways by different subject experts. It has been summerised below:

1.8.1 Inherent part of Management

Human resources management is inherent in the process of management. This function is performed by all managers throughout the organization rather than by the personnel department only. If a manager is to get the best of his people, he must undertake the basic responsibility of selecting people who will work under him. Also take interest in training and motivating the employees and of appraising their performance for improving their quality. (Memoria and Memoria, 1996)

1.8.2 Pervasive Function

Personnel management is a pervasive function of management. It is performed by all managers at various levels in the organization. In other words, every

manager from managing director to the foreman is required to perform the personnel function on a continuous basis. It is not a responsibility that a manager can leave completely to someone else. However, he may secure advice and help in managing people from experts who have special competence in personnel management and industrial relations. (Coff, 1997)

1.8.3 Basic to All Functional Areas

Human Resources Management or Personnel Management permeates to all the functional areas of management such as production management, financial management, and marketing management. That is, every manager from top to bottom, working in any department has to perform the personnel functions. Though the personnel department is created under the supervision of a person designated a “Personnel Manager” or “Human Resources manager”, it should not be assumed that the other managers are relieved of this responsibility.

1.8.4 People Centered

The Human Resources Management is people centered and is relevant in all types of organizations. It is concerned with all categories of personnel from top to bottom of the organization. The broad classification of personnel in industrial enterprise may be as follows:

- Blue collar workers (i.e. those working on machines and engaged in loading, unloading etc.) and white collar workers (i.e. clerical employees).
- Managerial and non-managerial personnel.
- Professional (such as Accountant, Company Secretary, lawyer, etc.) and non-professional personnel. (Leonard, 1998)

1.8.5 Personnel Activities or Functions

Personnel management involves several functions concerned with the management of people at work. It includes manpower planning, employment,

placement, training, appraisal and compensation of employees. For the performance of these activities efficiently, a separate department known as Personnel Department is created in most of the organizations. (Barney and Wright, 1998)

1.8.6 Continuous Process

Personnel management is not a 'one shot' function. It is to be performed continuously if the organizational objectives are to be achieved smoothly. To quote G.R Terry, "The personnel management requires a constant alertness and awareness human relations and their importance in everyday operations". (Terry, 2005)

1.8.7 Based on Human Relation

Personnel management is concerned with the motivation of human resources in the organization. The human beings cannot be dealt with the physical factors of production. Every person has different needs, perception and expectations. The managers should give due attention to these factors. They require human relations skills to deal with the people at work. Human relations skills are also required in training, performance appraisal, transfer and promotion of subordinates. If the personnel function is performed properly, the human relations in these organizations will be cordial. (Chhabra, 2007)

Today in HR manager has emerged as an executive who is important, if not more than, as the financial controller or the production manager. His necessitates that he has a global vision and a keen foresight and acts as catalyst or organizational change. HRM is viewed within a free enterprise world, where the factor markets as well as the product market have been liberated. The nature of this relationship will depend on the role of the state, the consciousness of the working class. Alienation of the workforce, anomie, labor aristocracy and the model of the production function will become useful points of reference in any future theories .The model above describes HRM as a line function, which facilitates the

interaction between the owners of capital and the owners of labor power, so that the objective function of the organization is optimized hence there is a need to study organizational effectiveness and organizational development .(Gratton, 1998)

1.8 Functions of Human Resource Management

The central focus for HR management must be on contributing to organizational success. As Figure 3 depicts, key to enhancing organizational performance is ensuring that human resources activities support organizational efforts focusing on productivity, service, and quality.

Productivity: As measured by the amount of output per employee, continuous improvement of productivity has become even more important as global competition has increased. The productivity of the human resources in an organization is affected significantly by management efforts, programs, and systems.

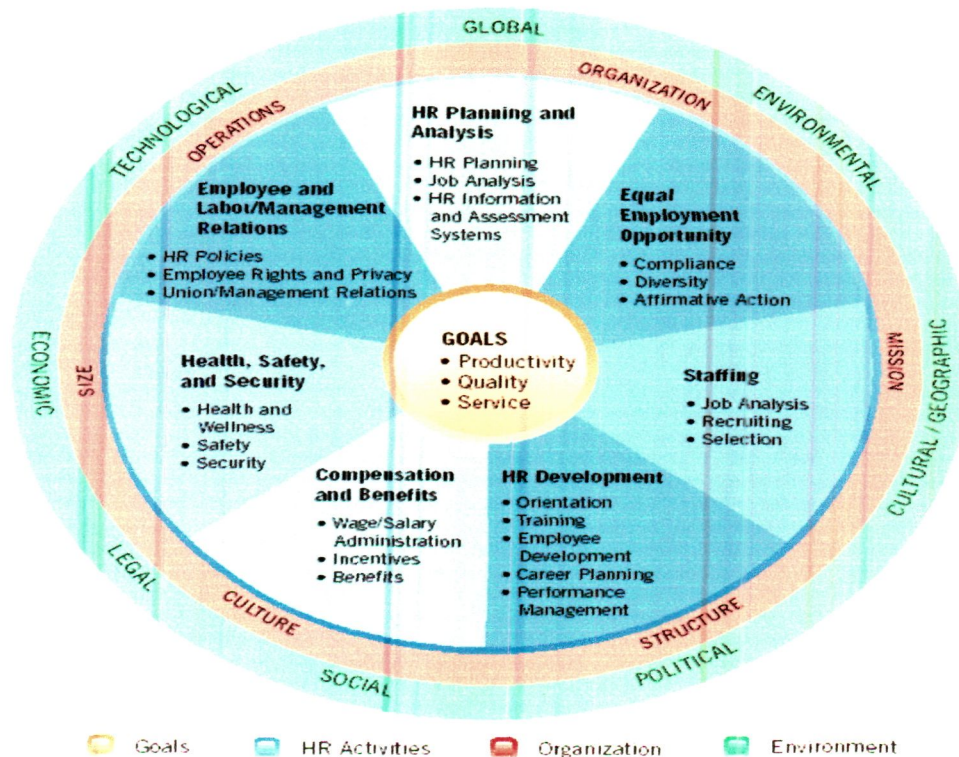
Quality: The quality of products and services delivered significantly affects organizational success over the long term. If an organization gains a reputation for providing poor-quality products and services, it reduces its organizational growth and performance. An emphasis on quality requires continuous changes aimed at improving work processes. That need opens the door for reengineering the organizational work done by people. Customer value received and satisfaction become the bases for judging success, along with more traditional HR measures of performance and efficiency.

Service: Because people frequently produce the products or services offered by an organization, HR management considerations must be included when identifying service blockages and redesigning operational processes. Involving all employees, not just managers, in problem solving often requires changes in corporate culture, leadership styles, and HR policies and practices.

To accomplish these goals, HR management is composed of several groups of interlinked activities. However, the performance of the HR activities must be done in the context of the organization, which is represented by the inner rings in Figure-3. Additionally, all managers with HR responsibilities must consider

external environmental forces—such as legal, political, economic, social, cultural, and technological ones—when addressing these activities. These external considerations are especially important when HR activities must be managed internationally, the HR activities for which a brief overview follows are:

Figure-1.3 Human Resource Management Activities



Source: Lyle M. Spencer, 1995

1.8.1 HR Planning and Analysis

HR planning and analysis activities have several facets. Through HR planning, managers attempt to anticipate forces that will influence the future supply of and demand for employees. Having adequate human resource information systems (HRIS) to provide accurate and timely information for HR planning is crucial. The importance of human resources in organizational competitiveness must be addressed as well. As part of maintaining organizational competitiveness, HR analysis and assessment of HR effectiveness must occur. The internationalization of organizations has resulted in greater emphasis on global HR management. Equal Employment Opportunity Compliance with equal employment opportunity (EEO) laws and regulations affects all other HR

activities and is integral to HR management. For instance, strategic HR plans must ensure sufficient availability of a diversity of individuals to meet affirmative action requirements. (Ragburam and Arvey, 1994)

1.8.2 Staffing

The aim of staffing is to provide an adequate supply of qualified individuals to fill the jobs in an organization. By studying what workers do, job analysis is the foundation for the staffing function. From this, job descriptions and job specifications can be prepared to recruit applicants for job openings. The selection process is concerned with choosing the most qualified individuals to fill jobs in the organization. (Summers and Summers, 1997)

1.8.3 HR Development

Beginning with the orientation of new employees, HR training and development also includes job-skill training. As jobs evolve and change, ongoing retraining is necessary to accommodate technological changes. Encouraging development of all employees, including supervisors and managers, is necessary to prepare organizations for future challenges. Career planning identifies paths and activities for individual employees as they develop within the organization. Assessing how employees perform their jobs is the focus of performance management. (Duncan, Ginter and Swayne, 1998)

1.8.4 Compensation and Benefits

Compensation rewards people for performing organizational work through pay, incentives, and benefits. Employers must develop and refine their basic wage and salary systems. Also, incentive programs such as gain sharing and productivity rewards are growing in usage. The rapid increase in the costs of benefits, especially health-care benefits, will continue to be a major issue. (Joan E. Pynes, 2000)

1.8.5 Health, Safety, and Security

The physical and mental health and safety of employees are vital concerns. The traditional concern for safety has focused on eliminating accidents and injuries at work. Additional concerns are health issues arising from hazardous work with certain chemicals and newer technologies. Through a broader focus on health,

HR management can assist employees with substance abuse and other problems through Employee Assistance Programs (EAP) in order to retain otherwise satisfactory employees. Employee wellness programs to promote good health and exercise are becoming more widespread. (Sisson, 1993)

Workplace security has grown in importance, in response to the increasing number of acts of workplace violence. HR management must ensure that managers and employees can work in a safe environment. (Gillian Flynn, 1997)

1.8.6 Employee and Labor/Management Relations

The relationship between managers and their employees must be handled effectively if both the employees and the organization are to prosper together. Whether or not some of the employees are represented by a union, employee rights must be addressed. It is important to develop, communicate, and update HR policies and rules so that managers and employees alike know what is expected. In some organizations, union/management relations must be addressed as well. (Spencer, 1995)

1.8.7 Performance Appraisal

Performance Appraisal is a process of systematically evaluating Performance and providing feedback upon which Performance Adjustments can be made. Similarly, (Nelson, 1991) has defines Performance Appraisal as a comparison of actual Performance with expected to asses an employee contribution to the organization. Performance appraisal play very important role for overall development of human resources.

“Human Resources Development is the process by Which corporate management stimulates the motivation of employees to perform productively Performance Appraisal is a part of Performance Management .Performance Management may be defined as “Multi-step process of aligning employees’ work behaviors with the strategy and goals of the organization . It is the process of creating a work environment in which people are enable to perform to best of their abilities . It is based on the principle of

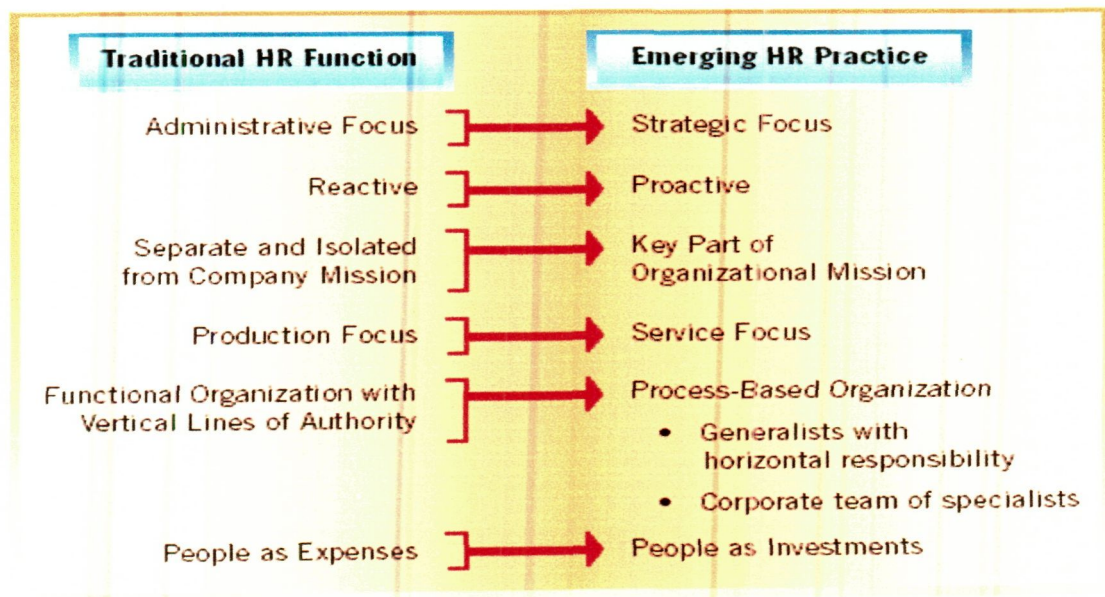
management system by agreement rather than management by command .A performance measurement system is a tool for implementing strategic planning and achieving continuous improvement at all levels of an organization . (Becker & Gerhart, 1996)

Performance Management essentially consists of Performance planning Performance analysis, Performance appraisal, Performance development, Performance management audit.

Performance appraisal is one tool available to successfully manage performance management process . Performance Appraisal may be defined as “The process by which an employee’s contribution to the organization during a specified period is assessed .” It is an important strategic management tool.

With the passage of time the role of HR has changed from conventional to modern one. The transforming of these functions is given in the figure-4.

Figure -1.4 Shifts in HR Management



SOURCE: Watson, 2008

1.9 Balanced Scorecard Approach

The BSC provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures. BSC translates mission and strategy into objectives and measures, organized into four different perspectives; financial, customer, internal business process, and learning and growth. The scorecard provides a framework, a language, to communicate mission and strategy; it uses measurement to inform employees about the drivers of current and future success. A lot of people think of measurement as a tool to control behavior and to evaluate past performance. However the BSC should be used in a different way – to articulate the strategy of the business, to communicate the strategy of the business, and to help align individual, organizational, and cross-departmental initiatives to achieve a common goal. The BSC should be used as a communication, informing, and learning system, not a controlling system. (Kaplan & Norton, 1996)

1.10 Human Resource Information Systems (HRIS)

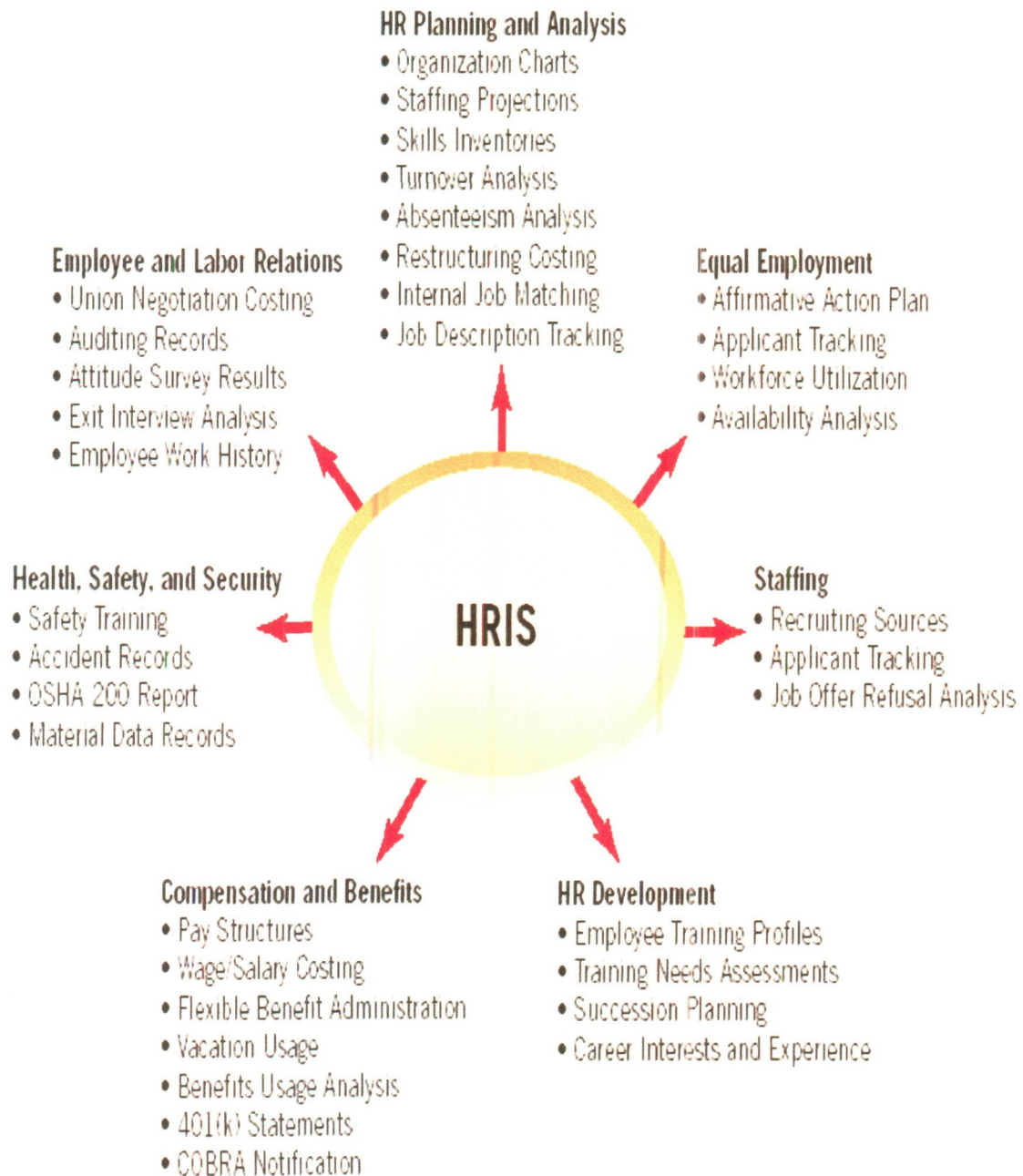
Computers have simplified the task of analyzing vast amounts of data, and they can be invaluable aids in HR management, from payroll processing to record retention. With computer hardware, software, and databases, organizations can keep records and information better, as well as retrieve them with greater ease. A human resource information system (HRIS) is an integrated system designed to provide information used in HR decision making. (Wolfe, 1998)

1.10.1 Uses of an HRIS

An HRIS has many uses in an organization. The most basic is the automation of payroll and benefit active ties. With an HRIS, employees' time records are entered into the system, and the appropriate deductions and other individual adjustments are reflected in the final paychecks. As a result of HRIS development and implementation in many organizations, several payroll functions are being transferred from accounting departments to HR departments.

Another common use of HRIS is EEO/affirmative action tracking. Beyond these basic activities, many other HR activities can be affected by the use of an HRIS.

Figure-1.5 Uses of a Human Resource Information System (HRIS)



Source: Susan Wolfe, 1998

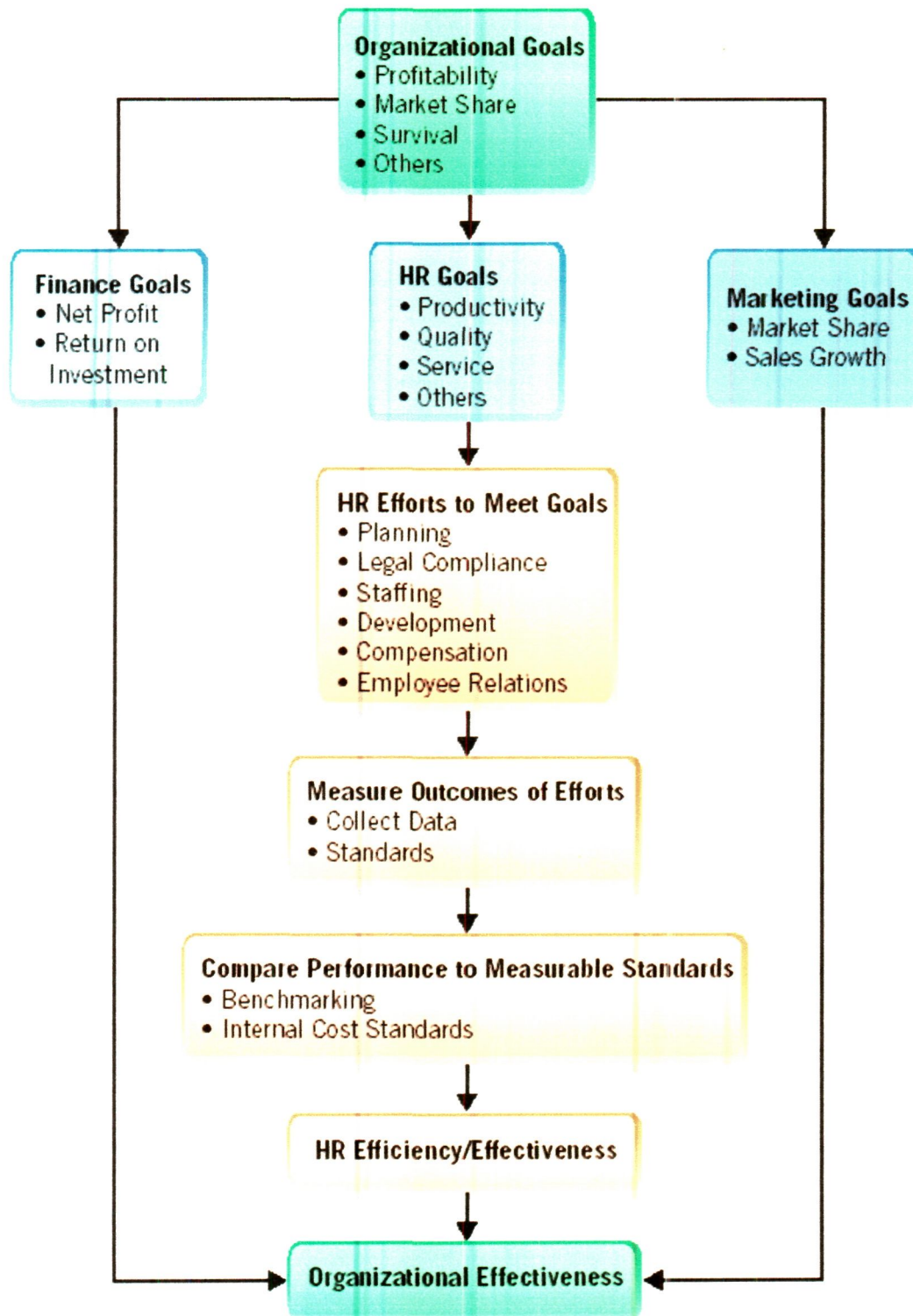
1.11 Organizational Effectiveness

Organizational effectiveness is the concept of how effective an organization is in achieving the outcomes the organization intends to produce. Even with the best management, superior strategy and flawless execution an organization can be less successful than it could be. Organizations who understand employees as partners stand a much better chance of achieving high organizational effectiveness and efficiency. "Organizational effectiveness is about each individual doing everything they know how to do and doing it well". The need to align people's skills with business goals in an ever more competitive market has become a continuous need that needs to be satiated. The best business strategy requires the best people strategy. People drive an organization's success. (Smith and Marinakis, 1997)

Effectiveness tends to refer goal-achieving behavior & its result & efficiency refers to input-output relationship. It involves many approaches in conceptualizing the term "Effectiveness". These approaches can be grouped into three:

- Goal Approach
- Functional Approach
- System Resource Approach
- Organizational Development Approach
- Balance Scorecard Approach

Figure-1.6 Overview of the Evaluation Process for HR



Source: Mark Smith and Susan Marinakis, 1997

1.12 Conclusions

Human resources play a crucial role in the development process of modern economics. With increasing globalization of economy, market place has become increasingly complex, competitive and highly uncertain. It is the difficult task to manage the people. The greatest resources of the world are the human resources. Without human resources nothing could achieve. Human Resources Development is organized learning experiences provided by employers within specified time to bring about the possibilities of performance. It is forecasting long term work related learning capacity at individual, group and organizational level. In order to developed the human resources there is a need not only by providing training and development but also there is a need to make a performance appraisal and potential appraisal among the workforce and senior level human resource too. Therefore the innovative method of human resources management and it appraisal are being adapted by mangers from time to time. The Balanced Scorecard Method is the one of the latest technique for managing the human resource effectively. After going through the concept of Human Resource Management in detail, the next concern is to discuss the conceptual framework of Balance Score Card. The conceptual framework of Balance Score Card is discussed in detail in the next chapter.

Chapter-2

A Conceptual framework of Balance Scorecard Approach

- 2.1 Introduction**
- 2.2 Evolution of Balance Scorecard**
- 2.3 Concept of Balance Scorecard**
- 2.4 Features of a Good Balance Scorecard**
- 2.5 Key Elements of Balance Scorecard Success**
- 2.6 The four perspectives of Balance Scorecard**
- 2.7 Benefits of Balance Scorecard**
- 2.8 Criticism of Balance Scorecard**
- 2.9 Balanced Scorecard's Four Strategic Processes**
- 2.10 Steps in Implementation of Balance Scorecard**
- 2.11 Establishing Strategy by Building up a Balanced Scorecard**
- 2.12 Testing the Balanced Scorecard**
- 2.13 Common Problems in Balance Scorecard Implementation**
- 2.14 Conclusion**

Chapter-2

A Conceptual framework of Balance Scorecard Approach

2.1 Introduction

The previous chapter dealt with the conceptual framework of the Human Resource Management. Various aspects of the Human Resource Management were discussed in detail including concepts, approaches, functions and other issues. After going through Human Resource Management, it is required to discuss the Balance Scorecard approach of Human Resource Management. The detailed study of the Balance Scorecard has been discussed in this chapter.

A balanced scorecard measures performance across multiple areas of an organization, all linked directly to the organization's strategy and vision. Rather than focus solely on a single factor such as financial earnings, a balanced scorecard considers an organization's performance in multiple key strategic and operating areas. The linkage of strategy to the organization's operating activities is key to the balanced scorecard system.(Kaplan and Norton, 1996)

The Balanced Scorecard tool is an attempt to deal with these types of issues. It was originally designed as a tool for measuring performance that developed into a new strategic management control system, which helped implement the company's strategy. The aim of the Balanced Scorecard is basically to translate the strategy into action. It supplements traditional financial measures with criteria that measure performance from three additional perspectives - those of customers, internal business processes, and learning and growth. It is also used as a system for communication, information and learning. It therefore enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they will need for future growth. The Balanced Scorecard is not a replacement for financial measures; it is their complement (Kaplan & Norton, 1996). Given that companies' survival depends on their ability to innovate, they need to have knowledge in

order to learn, adjust and make changes. As the Japanese management expert Nonaka (1991) says; "In a world where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge". Thereby, a Balanced Scorecard where ideas from the knowledge management theories are taken into consideration could provide an even better way to manage those hard to reach resources that the organisation possesses, but often has inadequate tools for managing. Today, every business is a knowledge business, and almost every worker is a knowledge worker (Drucker, 1991). Given the rapid changes and advances in most fields, skills and techniques learned more than a decade ago are inadequate to compete in today's market. In the face of these challenges, the major defense for many organisations is to manage knowledge on a broad basis. That is to educate, build an internal knowledge base, pool and deploy the knowledge they have, invest in the development of new and proprietary knowledge, and put their knowledge to use as effectively as possible (Wiig, 1995). The Balanced Scorecard – a clearly defined management tool - combined with the knowledge of management ideas could be just the right way to do it.

Accordingly,

2.2 Evolution of Balance Scorecard

The Balanced Scorecard is an approach to measurement. The evolution of the Balanced Scorecard idea began with the injunction that managers ought to measure more than financial results, and proposed a matrix with four types of measures: financial, internal (process), innovation and learning, and customer. Initial work focused on how managers might identify the best measures in each of the four areas and how they might communicate them with subordinates.

Throughout the history of contemporary management theories starting from the ones that were introduced by the intrusion of the mass production in the beginning of the 20th century and until today, all the gurus of management have been trying to find uniform solutions on more efficient allocation and use of very limited resources available to businesses. Those paths in seeking the Holy Grail

of operational efficiency have brought up several new management theories. (Debuske & Crabtree, 2006)

In the dawn of the century, Frederick W. Taylor (1911) established the very concepts of resource allocation in his *Principles of Scientific Management*. In 1920's it went around assembly line and motion studies as the first experience from systematic mass production had given theorists quite a lot of materials to be analyzed from the point of view of using traditional blue-collar employees more efficiently. (Taylor, Frank, Gilbrecht and Ford, 1920). In the 1930's, the main topic was motivation of employees, as it turned out that human nature does not enable to work long hours on a repetitive tasks without frustration level getting so high enough to diminish productivity. In the 1940-ies and 1950's, the first statistical and linear methods were introduced in trying to measure logistics of the operations management and its implications to overall company success in financial-analysis side. In the beginning of 1980's, partly because of introduction of electronic data processing equipment and quick development of computers, the whole array of management techniques were initiated. The particular reasons for the vast development of the new theories were catalyzed mainly by ever growing competition generated through more systematic use of computers, and of course also by rapid growth of the importance of human capital.

Today's companies are in the midst of a revolutionary transformation. Industrial age competition is shifting to information age competition. During the industrial age, roughly from 1850 to about 1975, companies succeeded by how well they could capture the benefits from economies of scale and scope. (Chandler, 1990) Technology mattered, but, ultimately, success accrued to companies that could embed the new technology into physical assets that offered efficient, mass production of standard products. During the industrial age, the financial control systems were developed in major companies to facilitate and monitor efficient allocations of financial and physical capital. (Chandler, 1977). A summary financial measure such as return-on-capital-employed (ROCE) could both direct a company's internal capital to its most productive use and monitor the efficiency

by which operating divisions used financial and physical capital to create value for shareholders.

Prior to 1980s many academics and consultants became concerned that too much emphasis was being put on financial and accounting measures of performance. Management accounting systems had been perfected to produce detailed cost breakdowns and extensive variance reports. It was realized that these systems were not useful for managing a business under the circumstances resulted out of the emergence of global competitive environment during 1980s.

Product quality, delivery schedules, reliability, after-sales service, customer satisfaction became key competitive variables. But none of these were measured by the traditional performance measurement systems.

During 1980s much greater emphasis was given to incorporating non-financial performance measures as mentioned above, into the management reporting system as they provided feedback on variables that are required to compete successfully in a global economic environment. But a proliferation of performance measures emerged and has resulted in confusion when some of the measured conflicted with each other.

The need to link financial and non-financial measures of performance and identifying key performance measures led to the emergence of "Balanced Score Card" approach developed by Norton and Kaplan (1992) in the U.S. The Balanced score card is defined as "an approach to the provision of information to management to assist strategic policy formulation and achievement. It emphasized the need to provide the user with a set of information, which addresses all relevant areas of performance in an objective and unbiased fashion".

2.3 Concept of Balance Scorecard

The balanced scorecard methodology, an outgrowth of prior measurement and management methodologies like total quality management (TQM), has existed for decades, but it was formalized in the early 1990s by Robert Kaplan and David

Norton. (Kaplan, 1998) Kaplan and Norton (1996) not only gave it a formal name but also put structure around the way organisations can measure how well they are functioning and how to predict future performance. Basically, it's a way to map and translate complex business information into something that's understandable to everyone. The methodology starts with targets defined by the organisation, followed by scorecard measures. These usually include both corporate targets and business unit targets, which are then honed into individual measures and targets. It's a very flexible approach, designed to be adapted to any organisation's needs. And virtually anything can be measured.

Robert S. Kaplan and David P. Norton (1992) introduced the balanced scorecard to the private sector as a methodology for measuring an organization's performance beyond profit margins and dividend yields.

They realized that executives rely on more than financial indicators when making decisions, and they concluded that a wider range of performance measures was needed to capture the financial and operational performance of an organization. They also observed that performance measurement systems often are designed to measure specific employee tasks with workload indicators, which can create an environment of behavior control rather than creative thinking. The balanced scorecard, which measures four dimensions of an organization financial, internal business, innovation and learning, and customer, is designed to promote a culture that emphasizes strategy development for maximizing the efficiency and the effectiveness of service delivery. Although originally designed for the private sector, the balanced score card soon found its way into local government. By 1998 at least twenty-three municipal governments had adopted the balanced scorecard because performance in the public sector always has been a multidimensional concept (Kathy and Kidwell, 2000).

However, organizational barriers to this management tool have tended to make it an option only for large local governments. These barriers include inadequate management sponsorship, organizational resistance to change, lack of employee skills, and difficulty in measuring service effectiveness (Ittner, 1998).

In 1996, when Charlotte became the first municipality in the United States to adopt the balanced scorecard, city officials realized that they had to modify the management tool in order to make it fit the public sector (Niven, 2003).

An overall modification was to align the balanced scorecard with the city's vision and strategic themes, ensuring that objectives and measures selected for each of the four dimensions would provide feedback on the overall direction of the organization. The city also had to modify the four dimensions of the balanced scorecard. (Charlotte, 2007)

To address the customer dimension, the private sector can rely primarily on proxy measures that are calculated from sales data. Although proxy or administrative measures often are used in the public sector, some local governments use citizen surveys to assess service quality directly (Kelly, 2005).

Charlotte (2007) changed this dimension to "Serve the customer," reflecting the city government's proactive organizational culture. It identified a blend of administrative and customer-satisfaction indicators to measure six objectives in this dimension: "Reduce crime," "Increase the perception of public safety," "Strengthen neighborhoods," "Provide transportation choices," "Safeguard the environment," and "Promote economic opportunity." An example of an administrative indicator is average on-time performance for the transit system, which supports the objective of providing transportation choices. An example of a customer-satisfaction indicator is the percentage of citizens who report feeling safe in neighborhoods, which supports the objective of increasing the perception of public safety. The internal business dimension did not require major modification. Kaplan and Norton (1996) envisioned that organizations would turn to their performance measurement systems to select or develop measures for this dimension, which focuses on the efficiency and the effectiveness of processes and procedures. Charlotte merely renamed this dimension "Run the business." It relies primarily on effectiveness measures to support three objectives: "Develop collaborative solutions," "Enhance customer service," and "Improve technology efficiencies." For example, the measure of percentage of

911 calls answered within thirty seconds was selected as part of the objective of enhancing customer service.

Kaplan and Norton (1996) proposed measures like sales growth, operating income, and market share for measuring the financial dimension of the organization. Because organizations in the public sector are not profit driven, Charlotte broadened this perspective to "Manage resources" and identified four objectives: "Maintain its AAA bond rating," "Deliver competitive services," "Expand its tax base and revenues," and "Invest in infrastructure." It then selected performance measures to track progress toward achieving each objective. For example, the city's street-resurfacing cycle as calculated by annual funding is used to measure the objective of investing in infrastructure.

Finally, Charlotte (2007) needed to make substantial modifications in the innovation and-learning dimension. Kaplan and Norton designed this dimension primarily to capture product development.

The public sector is more involved in providing labor-intensive services than privatization in developing products, and this requires a different philosophical approach to measuring innovation and learning. Charlotte renamed the dimension "Develop employees" and selected three objectives "Achieve a positive employee climate," "Recruit and retain a skilled, diverse workforce," and "Promote learning and growth." A key performance measure for tracking recruitment and retention is the rate of voluntary turnover.

Charlotte's (2007) successful experience with modifying, adopting, and implementing the balanced scorecard suggests that certain management tools designed for the private sector can be used in the public sector. But as with any management tool, local governments must be prepared to make further modifications to the balanced scorecard during the adoption process in order to align it with their individual needs. Also, local governments with experience in performance measurement are better candidates for the balanced scorecard, because they are more experienced at responding to the complexity of tracking

performance within four dimensions that are not mutually exclusive. In other words, understanding what the different types of measures are, what service aspects they capture, and how they can be used to make decisions helps officials place the measures in the appropriate dimension. Organizations need a champion of the balanced scorecard to enhance the likelihood of success. The city manager of Charlotte embraced that role, believing that the management tool would aid in meeting the city's needs for better performance and greater accountability.

However, Charlotte (2007) did not adopt the new management tool simply as another way to measure and report performance. It embraced the tool within the larger framework of new public management, which was partially being driven by the reinventing government movement of the early 1990s. The mayor and the council strongly supported this change in organizational philosophy, which included cost reduction, innovation, and reduction of hierarchy.

The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. It was originated by Robert Kaplan (1996) and David Norton as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance. While the phrase balanced scorecard was coined in the early 1990s, the roots of this type of approach are deep, and include the pioneering work of General Electric on performance measurement reporting in the 1950's and the work of French process engineers (who created the *Tableau de Bord* – literally, a "dashboard" of performance measures) in the early part of the 20th century. (Itami, 1996)

The Balanced Scorecard has evolved from its early use as a simple performance measurement framework to a full strategic planning and management system. The "new" balanced scorecard transforms an organization's strategic plan from an attractive but passive document into the "marching orders" for the organization on a daily basis. It provides a framework that not only provides performance measurements, but helps planners identify what should be done and measured. It enables executives to truly execute their strategies. (Viswesvaran & Schmidt, 1996)

This new approach to strategic management was first detailed in a series of articles and books by Drs. Kaplan and Norton. Recognizing some of the weaknesses and vagueness of previous management approaches, the balanced scorecard approach provides a clear prescription as to what companies should measure in order to 'balance' the financial perspective. The balanced scorecard is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. When fully deployed, the balanced scorecard transforms strategic planning from an academic exercise into the nerve center of an enterprise. (Otley, 1999)

"The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation." (Kaplan and Norton, 1996)

2.4 Features of a Good Balance Scorecard

A Good Balance Scorecard possesses the following essential feature:

- It tells the story of a company's strategy, articulating a sequence of cause and effect relationships.
- It helps to communicate the strategy to all members of the organization by translating the strategy into coherent and linked set of understandable and measurable operation targets.
- A balanced score card emphasizes non-financial measures as a part of program to achieve future financial performance.
- The balanced score card limits the number of measures identifying only the most critical areas. The purpose is to focus manager's attention on measures that most affect the implementation of strategy.
- The balanced score card highlights less than optimal trade offs that managers may make when they fail to consider operational and financial measures together.

2.5 Key Elements of Balance Scorecard Success

Balanced Scorecard initiatives have a mixed track record. However, when we study organizations that have had success, we notice several recurring themes. These provide six lessons for success for all balanced scorecard practitioners.

- Understand that the balanced scorecard is part of a bigger process that starts with strategy. The balanced scorecard framework forms one (key) component in an integrated business performance management process that revolves around business strategy. This process is really a system where the balanced scorecard plays a critical role in translating business strategy into measurable action. With this in mind, successful BSC organizations define a solid business strategy prior to BSC development. While this may appear obvious to BSC practitioners, many "war stories" exist about organizations that threw themselves into a measurement initiative without spending time on strategy first. Generally, the result of these initiatives is sub-optimization with results that may or may not support business strategy achievement. When cascaded from strategy, the BSC framework provides an important connection between

strategic business performance and individual employee performance. In addition, the BSC helps close the feedback loop in the business-performance management system by providing a means for the business to: monitor and actively manage progress towards the achievement of business strategy, further explore and understand the cause and effect relationships within the business, and manage/change business strategy dynamically based on internal insights or shifts in the external operating environment.(Kaplan, and Norton, 1995)

- Visible and genuine senior leadership involvement is critical to the success of any BSC initiative. That is, you must secure hands-on executive participation in the balanced scorecard development, implementation and management. Commitment at the top is so important that successful BSC organizations treat it as a "show stopper"- focusing on resolving support issues before moving forward. The issue of gaining leadership support is the most frequent concern faced by new balanced scorecard practitioners. Most BSC journeys don't begin with executive support from the start - very frequently, the push for a balanced scorecard initiative begins at a grass roots level. The key to "selling" the BSC to executives is to take an individualized approach. That is, first look for the burning platform or key business improvement opportunity that could be addressed by the successful application of a business performance management approach like the balanced scorecard. Then, complete your BSC research (note: there is information out there that can help support your situation!) and build a balanced scorecard business case that clearly demonstrates the benefits required to solve your organization's critical business issue. Keep at it until the executives in your organization get the message.(Hides, Irani, Polychronakis and Shar, 2000)
- A balanced scorecard vision or philosophy is simply a clear statement that describes what your BSC will look like, how it will operate, how it will be built, and how the organization will use it. When created early in the balanced scorecard development process, your BSC vision provides a valuable touchstone going forward providing focus and facilitating quick consensus

when critical balanced scorecard decisions are required.(Hendricks, Menor and Wiedman, 2004)

- Maximize balanced scorecard utilization by fully deploying it at all levels of the organization. Successful BSC organizations make their balanced scorecard widely available so that everyone can "make strategy their job." Fully deploying a balanced scorecard across an organization helps develop strategic awareness amongst employees. This is important because successful strategy implementation requires the active contribution of every employee as they make decisions in their day to day work - decisions that can either contribute to or take away from the business strategy. Many business leaders voice concern about sharing their business strategy so broadly across the organization. Worries include the disclosure of critical strategic information to competitors. While these are valid concerns, successful BSC organizations know that the benefits of a broad deployment philosophy and in building employee satisfaction and loyalty levels far outweigh the risk of serious information leaks.(Pandey , 2005)
- To support BSC implementation and its ongoing use, successful BSC organizations view communication and education on their business strategy and the balanced scorecard as an important internal marketing campaign. As a result, few of these organizations use only a single mode of communication to do the job. In fact, they use almost every type of communication method available, from general communication modes (e.g. large group meetings and mass distribution e-mails) to those that are very personalized with customized messages (e.g. face to face discussions) to ensure communication success. (Pineno, 2007)
- Successful BSC organizations deepen alignment by mirroring their balanced scorecard framework and categories in as many business activities as possible: reward and recognition programs, individual goal plan formats, incentive compensation plan formats, strategic plan categories and format, and almost anything else they can think of! They maximize alignment with the balanced scorecard until it becomes so integral to the business that it is

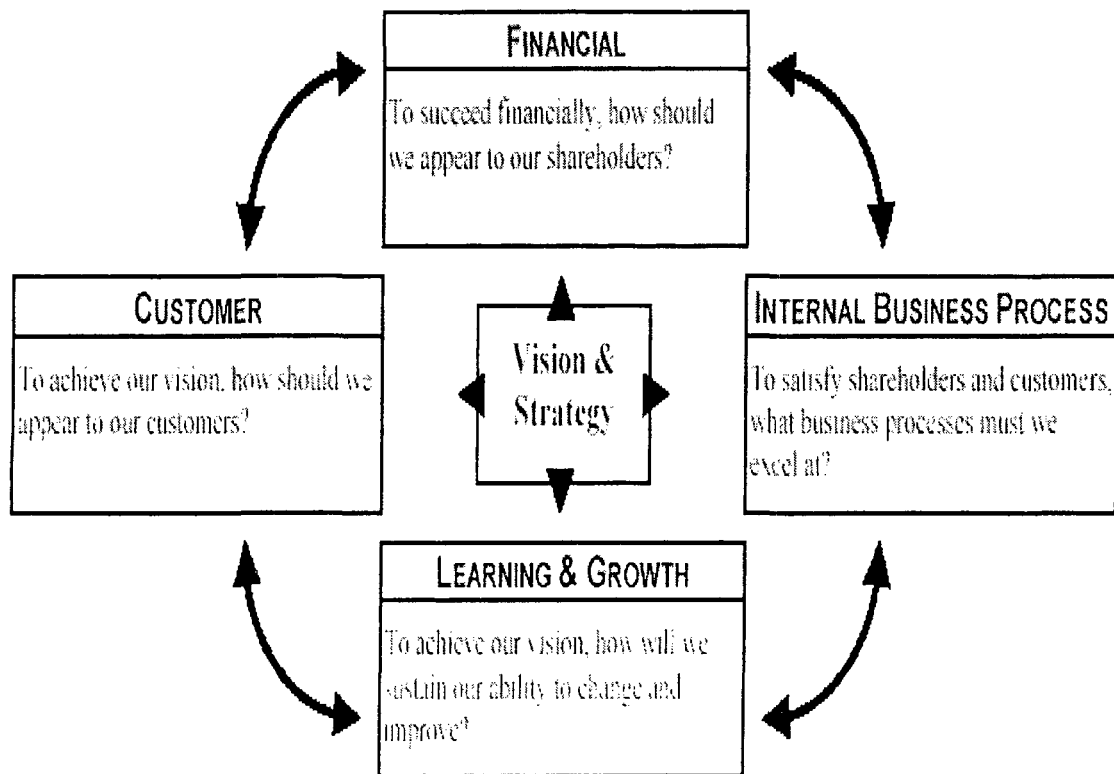
automatic and embedded in everyday work. (Hendricks, Menor and Wiedman, 2004),

2.6 The four perspectives of Balance Scorecard

The Balanced Scorecard, according to Kaplan and Norton (1996), consists of four perspectives. These are the financial perspective, the Customer perspective, the Internal Business Process perspective, and the Learning and Growth perspective. These four perspectives provide the framework for the scorecard, and measure the performance of a company during the past, present and the future. What is done today, in order to prepare for tomorrow, might not yield financial results until the future? This repositions the focus of a company from traditional short-term operation control, to more progressive long-term control.

There is no “law” in the Balanced Scorecard that states that a company should use all the perspectives described below or that it cannot add an extra perspective. On the contrary, companies implementing a Balanced Scorecard should consider adapting it to their environment and internal business processes. Kaplan & Norton (1997) also recognise that there is sometimes a need for changes in the Balanced Scorecard perspectives, but they say that companies should consider changes in the scorecard perspectives carefully. They claim that there is a risk of wanting to put focus on too many things, and thereby to lose the focus on the things that set the basis for competitive advantage.

To achieve “balance” within the scorecard, the four perspectives need to be mutually dependent in order for the effects of different actions not to counteract with each other. The purpose of the concept is, as mentioned, to put the company’s vision and strategy into action, as well as to outline business strategy in four different respects, corresponding to the four perspectives (Kaplan & Norton, 1996):

Figure 2.1 Four Perspectives of Balance Score Card

Source: Kaplan & Norton, 1992

2.6.1 Financial Perspective

From all the measurement perspectives of a Balanced Scorecard, the financial perspective needs to be introduced the least as the main financial measurement systems have been analysed during the past years very thoroughly.

The particular financial performance measures for any Balanced Scorecard should define long-run financial objectives for the organisation. While most of the organisations would emphasise profitability objectives, other possibilities may also be considered. Businesses with many products in the early stage of their life cycle can stress rapid growth objectives, and mature businesses may emphasise maximising cash flow.

Norton and Kaplan (1992) recommended simplifying the financial perspective measurement selection pool to identify first the organisation's stage, which would mainly be one of the three:

- “Rapid growth” organisations - are at the early stages of their life cycle. They may have to make considerable investments to develop and enhance new products and services, to construct and expand production facilities, to build operating capabilities, to invest in systems, infra-structure, and distribution networks that will support relationships, and to nurture and develop customer relationships.
- “Sustain” organisations – organisations that still attract investment and reinvestment, but are required to earn excellent returns on their invested capital. These businesses are expected to maintain their existing market share and perhaps grow it somewhat. Investment projects will be more directed to relieving bottlenecks, expanding capacity, and enhancing continuous improvement.
- “Harvest” organisations - have reached a mature phase of their life cycle, where the company wants to harvest the investments made in the earlier two stages. These businesses no longer warrant significant investment – only enough to maintain equipment and capabilities, not to expand or build new capabilities. Any investment project will have to have very short and definite payback periods. The main goal is to maximise cash flow back to the organisation.

The financial objectives for businesses in each of these three stages are quite different. Financial objectives in the growth stage will emphasise sales growth; sales in new markets and to new customers; sales from new products and services; maintaining adequate spending levels for product and process development, systems, employee capabilities; and establishment of new marketing, sales, and distribution channels. Financial objectives in the sustain

stage will emphasise traditional financial measurements, such as return on capital employed, operating income, and gross margin.

Investment projects for businesses in the sustain category will be evaluated by standard, discounted cash flow, capital budgeting analyses. Some companies will employ newer financial metrics, such as economic value added and shareholder value. These metrics all represent the classic financial objective---earn excellent returns on the capital provided to the business.

The financial objectives for the harvest businesses will stress cash flow. Any investments must have immediate and certain cash paybacks. The goal is not to maximise return on investment, which may encourage managers to seek additional investment funds based on future return projections. Virtually no spending will be done for research or development or on expanding capabilities, because of the short time remaining in the economic life of business units in their "harvest" phase.

2.6.2 Customer Perspective

In the customer perspective of the Balanced Scorecard, managers identify the customer and market segments in which the business unit will compete and the measures of the business unit's performance in these targeted segments.

The customer perspective typically includes several generic measures of the successful outcomes from a well-formulated and implemented strategy. The generic outcome measures include customer satisfaction, customer retention, new customer acquisition, customer profitability, and market and account share in targeted segments. While these measures may appear to be generic across all types of organisations, they should be customised to the targeted customer groups from whom the business unit expects its greatest growth and profitability to be derived.

2.6.2.1 Market and Account Share

Market share, especially for targeted customer segments, reveals how well a company is penetrating a desired market. For example, a company may temporarily be meeting sales growth objectives by retaining customers in non-targeted segments, but not increasing its share in targeted segments. The measure of market share with targeted customers would balance a pure financial signal (sales) to indicate whether an intended strategy is yielding expected results.

When companies have targeted particular customers or market segments, they can also use a second market-share type measure: the account share of those customers' business (some refer to this as the share of the "customers' wallet"). The overall market share measure based on business with these companies could be affected by the total amount of business these companies are offering in a given period. That is, the share of business with these targeted customers could be decreasing because these customers are offering less business to all their suppliers. Companies can measure-customer by customer or segment by segment-how much of the customers' and market segments' business they are receiving. Such a measure provides a strong focus to the company when trying to dominate its targeted customers' purchases of products or services in categories that it offers.

2.6.2.2 Customer Retention

Clearly, a desirable way for maintaining or increasing market share in targeted customer segments is to retain existing customers in those segments. Research on the service profit chain has demonstrated the importance of customer retention.⁶ Companies that can readily identify all of their customers-for example, industrial companies, distributors and wholesalers, newspaper and magazine publishers, computer on-line service companies, banks, credit card companies, and long-distance telephone suppliers-can readily measure customer retention from period to period. Beyond just retaining customers, many companies will

wish to measure customer loyalty by the percentage growth of business with existing customers.

2.6.2.3 Customer Acquisition

Companies seeking to grow their business will generally have an objective to increase their customer base in targeted segments. The customer acquisition measure tracks, in absolute or relative terms, the rate at which a business unit attracts or wins new customers or business. Customer acquisition could be measured by either the number of new customers or the total sales to new customers in these segments. Companies such as those in the credit and charge card business, magazine subscriptions, cellular telephone service, cable television, and banking and other financial services solicit new customers through broad, often expensive, marketing efforts. These companies could examine the number of customer responses to solicitations and the conversion rate-number of actual new customers divided by number of prospective inquiries. They could measure solicitation cost per new customer acquired, and the ratio of new customer revenues per sales call or per dollar of solicitation expense.

2.6.2.4 Customer Satisfaction

Both customer retention and customer acquisition are driven from meeting customers' needs. Customer satisfaction measures provide feedback on how well the company is doing. The importance of customer satisfaction probably can not be over-emphasised. Recent research has indicated that just scoring adequately on customer satisfaction is not sufficient for achieving high degrees of loyalty, retention, and profitability. Only when customers rate their buying experience as completely or extremely satisfying can the company count on their repeat purchasing behaviour. (Porter, 1992)

2.6.2.5 Customer Profitability

Succeeding in the core customer measures of share, retention, acquisition, and satisfaction, however, does not guarantee that the company has profitable

customers. Obviously, one way to have extremely satisfied customers (and angry competitors) is to sell products and services at very low prices. Since customer satisfaction and high market share are themselves only a means to achieving higher financial returns, companies will probably wish to measure not just the extent of business they do with customers, but the profitability of this business, particularly in targeted customer segments. Activity-based cost (ABC) systems permit companies to measure individual and aggregate customer profitability. Companies should want more than satisfied and happy customers; they should want profitable customers. A financial measure, such as customer profitability, can help keep customer-focused organisations from becoming customer-obsessed.

The customer profitability measure may reveal that certain targeted customers are unprofitable. This is particularly likely to occur for newly acquired customers, where the considerable sales effort to acquire a new customer has yet to be offset from the margins earned by selling products and services to the customer. In these cases, lifetime profitability becomes the basis for deciding whether to retain or discourage currently unprofitable customers.

Newly acquired customers can still be valued, even if currently unprofitable, because of their growth potential. But unprofitable customers who have been with the company for many years will likely require explicit action to cope with their incurred losses. (Joseph, 1993)

2.6.2.6 Beyond the Core: Measuring Customer Value Propositions

Customers' value propositions represent the attributes that supplying companies provide, through their products and services, to create loyalty and satisfaction in targeted customer segments. The value proposition is the key concept for understanding the drivers of the core measurements of satisfaction, acquisition, retention, and market and account share. For example, customers could value short lead times and on-time delivery. They could value a constant stream of innovative products and services. Or they could value a supplier able to

anticipate their needs and capable of developing new products and approaches to satisfy those emerging needs.

While value propositions vary across industries, and across different market segments within industries, Kaplan and Norton (1996) have observed a common set of attributes that organises the value propositions in all of the industries where we have constructed scorecards. These attributes are organised into three categories.

- Product/Service Attributes
- Customer Relationship
- Image and Reputation

Product and service attributes encompass the functionality of the product/service, its price, and its quality. The image and reputation dimension enables a company to pro-actively define itself for its customers. The customer relationship dimension includes the delivery of the product/service to the customer, including the response and delivery time dimension, and how the customer feels about the experience of purchasing from the company.

In summary, the customer perspective enables business unit managers to articulate their unique customer and market-based strategy that will deliver superior future financial returns.

2.6.3 Internal Business Process Perspective

In the internal business process perspective, executives identify the critical internal processes in which the organisation must excel. The critical internal business processes enable the business unit to deliver on the value propositions of customers in targeted market segments, and satisfy shareholder expectations of excellent financial returns. The measures should be focused on the internal processes that will have the greatest impact on customer satisfaction and achieving the organisation's financial objectives.

The internal business process perspective reveals two fundamental differences between traditional and the Balanced Scorecard approaches to performance measurement. Traditional approaches attempt to monitor and improve existing business processes. They may go beyond just financial measures of performance by incorporating quality and time-based metrics. But they still focus on improving existing processes. The Balanced Scorecard approach, however, will usually identify entirely new processes at which the organisation must excel to meet customer and financial objectives. The internal business process objectives highlight the processes most critical for the organisation's strategy to succeed.

The second departure of the Balanced Scorecard approach is to incorporate innovation processes into the internal business process perspective. Traditional performance measurement systems focus on the processes of delivering today's products and services to today's customers. They attempt to control and improve existing operations - the short wave of value creation. But the drivers of long-term financial success may require the organisation to create entirely new products and services that will meet the emerging needs of current and future customers. The innovation process the long-wave of value creations, for many companies, a more powerful driver of future financial performance than the short-term operating cycle. But managers do not have to choose between these two vital internal processes. The internal business process perspective of the Balanced Scorecard incorporates objectives and measures for both the long-wave innovation cycle as well as the short-wave operations cycle.

2.6.4 Learning and Growth Perspective

The fourth Balanced Scorecard perspective, Learning and growth, identifies the infrastructure that the organisation must build to create long-term growth and improvement. The customer and internal business process perspectives identify the factors most critical for current and future success. Businesses are unlikely to be able to meet their long-term targets for customers and internal processes using today's technologies and capabilities. Also, intense global competition

requires that companies continually improve their capabilities for delivering value to customers and shareholders.

Organisational learning and growth come from three principal sources: people, systems, and organisational procedures. The financial, customer, and internal business process objectives on the Balanced Scorecard will typically reveal large gaps between existing capabilities of people, systems, and procedures and what will be required to achieve targets for breakthrough performance. To close these gaps, businesses will have to invest in re-skilling employees, enhancing information technology and systems, and aligning organisational procedures and routines. These objectives are articulated in the learning and growth perspective of the Balanced Scorecard. As in the customer perspective, employee-based measures include a mixture of generic outcome measures-employee satisfaction, employee retention, employee training, and employee skills-along with specific drivers of these generic measures, such as detailed indexes of specific skills required for the new competitive environment. Information systems capabilities can be measured by real-time availability of accurate customer and internal process information to front-line employees. Organisational procedures can examine alignment of employee incentives with overall organisational success factors, and measured rates of improvement in critical customer-based and internal processes.

2.7 Benefits of Balance Scorecard

The discussion of whether a company should use a Balanced Scorecard or a more traditional financial control system will probably continue for a long time. All systems have their benefits and disadvantages, and for the Balanced Scorecard, Ross (1999) has tried to summarise some of the scorecard's characteristics compared to financial control systems.

Figure 2.2 A comparison of FCS and BSC

	Financial	BSC
Reliability	High	Medium
Ease of use	High	Low
Comprehensiveness	Low	High
Time and effort required to develop	Low	High
Comparability	Medium	Low

Source: Roos, 1999

Major benefits include increased structure and shared objectives; these often lead to greater financial return. It allows organisations to become more functional and enabled. For specific programs, a balanced scorecard can raise the profile of key projects, which can help with funding and internal support. It's also possible to use the strategic map that a balanced scorecard approach creates to help guide programs toward success. In addition to measuring the performance of an organization, business units or departments within an organization can also use a balanced scorecard framework to link strategy to key operating activities and performance. (Keeping & Levy, 2000).

- It's particularly useful for developing performance measures for departments that have unique mission and strategic objectives like internal audit. (Libby, Salterio & Webb, 2004).
- Communicating strategic messages. The Balanced Scorecard clarifies organisational goals, that is, what the organisation as a whole is expected to accomplish, and measures the degree of success in attaining these goals (Bergendahl & Dagås, 1997; Olve, 1997).
- Long-term planning and control is a desirable element for most companies, and it is provided for in the Balanced Scorecard, since the scorecard enables long-term planning by establishing several future oriented, progressive key measures (Bergendahl & Dagås, 1997; Olve, 1997; Sundin, 1998).

- The ability to focus on non-financial measures, for example measures related to customers and processes, generates positive results even in a financial perspective. Increased understanding of such “soft” measures is essential in order not to neglect customers. Emphasis on other perspectives indirectly should result in an increase in corporate profitability (Bergendahl & Dagås, 1997; Olve, 1997).
- The Scorecard approach has a breadth that enables every single worker to identify with one of its components. Moreover, each worker is provided with feedback on the contribution he or she makes to the organisation, which clarifies how the individual helps the overall business reach the defined corporate objectives (Westin & Wetter, 1998; Lindvall, 1997; Bergendahl & Dagås, 1997).
- External awareness. By adding a customer and a learning & growth perspective, the company shows increased awareness of external influences and is better suited to react to its environment (Björklund, 1998).
- A balanced scorecard can assist an internal audit department in proactively responding to typical stakeholder question like as how does internal audit measure performance? (Lipe & Salterio, 2002)
- It helps companies focus on what has to be done in order to create a breakthrough performance.
- It acts as an integrating device for a variety of corporate programmes.
- It Makes strategy operational by translating it into performance measures and targets. (Otley, 1999).
- It helps break down corporate level measures so that local managers and employees can see what they need to do well if they want to improve organisational effectiveness. (Banker, Chang, & Pizzini, 2004)
- It provides a comprehensive view that overturns the traditional idea of the organisation as a collection of isolated, independent functions and departments.

- A balanced-scorecard framework can be an effective tool to link an internal audit department's strategies to its performance management system.
- A balanced scorecard can be useful in responding to questions from key stakeholders, such as senior management and the audit committee, regarding how the department measures performance and adds value to the organization, and in demonstrating alignment of the internal audit department's objectives to the organization's key strategies. (Hopwood, 1972)
- A balanced scorecard can assist in focusing department staff on performance improvement/quality assurance activities and can also be used for benchmarking an internal department to other internal audit departments. The strategies and key operating activities selected for a balanced scorecard should be specific to the needs or opportunities identified for the internal audit department. (Ittner, Larcker & Meyer, 2003)
- The Balanced Scorecard tool also puts a focus on the importance of enhancing the employee- and information-system capabilities as well as increasing the employee motivation. This is truly close to the aim with knowledge management work. In the Balanced Scorecard these aspects are usually measured in the learning and growth perspective. (Malina, & Selto, 2001)
- A system of corporate appraisal which looks at financial and non-financial elements from a variety of perspectives.
- An approach to the provision of information to management to assist strategic policy formation and achievement.
- It provides the user with a set of information which addresses all relevant areas of performance in an objective and unbiased fashion.
- A set of measures that gives top managers a fast but comprehensive view of the business.

2.8 Criticism of Balance Scorecard

No model can suit all companies and satisfy all critics, so the Balanced Scorecard has also been criticised and questioned. Since implementing a Balanced Scorecard is a tough, time-consuming process and also presents some of the most common pitfalls to the scorecard's success.

One aspect where the Balanced Scorecard receives critique is the way the measures in the scorecard are determined centrally. This is especially evident with the non-financial measures. A company uses non-financial measures to a certain degree before implementing a Balanced Scorecard, but these measures are mainly active on a local level. They have been developed locally over a long period of time and are also used and followed-up on the local level, where they have relevance. They might even be specific for a set of employees and managers – the ones that have developed the measures. With a Balanced Scorecard, the top management decides on a set of non-financial goals on a company level that risks being forced on the employees in the organisation (Mouritsen, 1996). The old goals were set in a local context and relevant there, while the new goals are set in a strategic context and thereby risk losing their relevance on the work-floor. The employees will have limited influence over the new goals that are set and thereby risk being alienated.

Another critique, very relevant to this thesis, is the problem to accrue and explain the non-financial goals. The financial goals used in traditional accounting and management control have been developed over several hundred years. Today, we have methods, like the Du-Pont system, of how to explain the meaning of different financial goals and how they are linked to each other. For example, a return on total assets can be broken down into profit margin and total asset turnover. However, the non-financial goals do not have these kinds of reciprocal links. Kaplan & Norton claim that the non-financial goals are essential to company strategy and that they should eventually be linked to the financial goals. The attention the Balanced Scorecard model has received indicates that many companies support this idea, but there are still unsolved questions of how to link these nonfinancial goals to each other and to financial performance. There is no

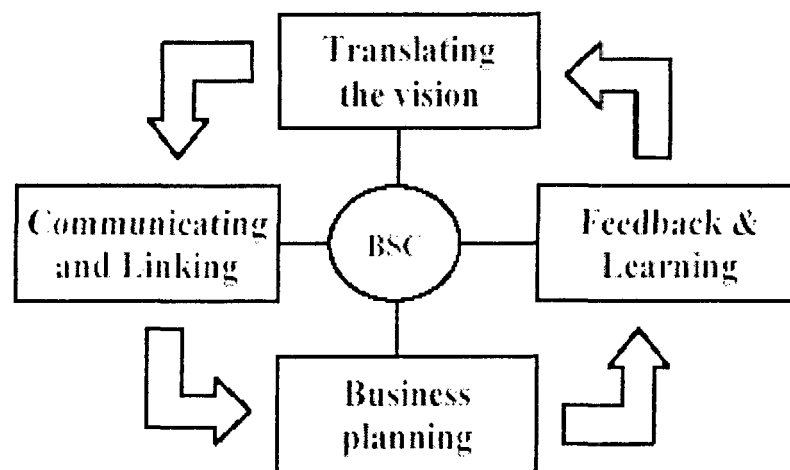
possibility to test the non-financial measures in a situation where we hold everything else constant. For example, what happens when employee or customer satisfaction rises? Will profitability increase as a result? Will the company increase their turnover? Will our internal processes be more efficient? They might, but it is very hard to prove (Mouritsen, 1996). Hence, the lack of established connections between non-financial goals is one of the reasons why skeptics doubt the Balanced Scorecard. There are also some threats to the success of the Balanced Scorecard, or at least issues that must be considered and dealt with so that it does not provide future problems for companies implementing the Balanced Scorecard.

- Declining worker participation: If the personnel in an organisation is not prepared for, and informed about the process of change, extensive resistance toward the project can develop (Strebel, 1996).
- The lingering dominance of the Financial Perspective. The danger in focusing too much on financial factors is that this can restrict focus linked planning discussions, and that short-term financial considerations can create a gap between strategy development and implementation. (Sundin, 1998; Westin & Wetter, 1998).
- Too many measures – the risk of losing clarity. Defining an overdose of measures in the scorecard can make follow-up too complicated. In that case, clarity can be lost (Sundin, 1998).
- Keeping the scorecard alive. Continuous maintenance of the Balanced Scorecard is essential. The risks of failure increase dramatically if the measures of the scorecard are considered “fixed”, or are not constantly reviewed. (Kaplan & Norton; 1996, Westin & Wetter, 1998)
- The time aspect. Change takes time. Even if the creation of the Balanced Scorecard might just take a few months, it often takes several years before the whole process is established throughout the organisation. Therefore, it is important for the management to be patient, and continue to work hard with the implementation (Lindvall, 1997).

2.9 Balanced Scorecard's Four Strategic Processes

The Balanced Scorecard links the company's vision and strategy to a number of measures, which together function as a framework for strategic measurement. Thereby, companies that use the scorecard do not have to rely on short-term financial measures as the sole indicators of the company's performance. Instead they have the opportunity to introduce four new management processes that contribute to linking long-term strategic objectives with short-term actions (Kaplan & Norton, 1996a).

Figure 2.3 Balanced Scorecard's Four Strategic Processes



Source: Kaplan & Norton, 1996

2.9.1 Translating the Vision

This first process helps managers build a consensus around the organisation's vision and strategy. The difficulty of this process largely depends on how the strategy has been developed. It is easier to translate a vision and strategy if it is shared among the employees in the company. The executives developing the strategy need input from people throughout the organisation to be able to develop a competitive strategy. They need information from the experts within the company to help them take the right decisions. For example, the workers on the front line are the ones that really understand what customers want, and who can execute strategies in a way that will please the customer (Birchard, 1996).

2.9.2 Communicating and Linking

The second process is very vital. It aims at communicating the strategy and objectives throughout the organisation and linking the strategy and objectives to the departmental and individual goals. This helps the employees to focus their efforts on a common goal and work in the same direction. Properly done, this should also increase flexibility in the organisation, since the Balanced Scorecard helps employees to understand the company's core competencies and its values. The Balanced Scorecard therefore gives managers a way of ensuring that all levels of the organisation understand the long-term strategy and that both departmental and individual goals are aligned with it (Kaplan & Norton, 1996b). However, unless a company ties the balanced set of measures to the compensation system, it will not be able to use the scorecard as the central organising framework for its management systems (Kaplan & Norton, 1996).

2.9.3 Business Planning

The third process is the process where the company should integrate its business plans with its financial plans. It includes aligning departmental business plans to the company strategy. The Balanced Scorecard aims not at reducing the creative initiatives from different departments but tries to set balanced measures as the basis for allocating resources and setting priorities, so that the organisation and its subparts can co-ordinate and under take the initiatives that move them toward their long-term strategic objectives.

2.9.4 Feedback and Learning

According to Kaplan & Norton (1996a), the fourth process gives the companies the capacity for strategic learning. The basis for this is that the company applying the Balanced Scorecard can monitor the results from the four perspectives and evaluate the strategy in the light of recent performance. Thus, the scorecard enables the company to reflect over their situation and thereby provide opportunity to adapt or change strategies to fit the current situation. In other words, the organisation needs the capacity for double loop learning. This is the

kind of learning that occurs when managers question their assumptions and reflect on whether the basic values and ideas under which they were operating are still consistent with current evidence, observations and experience (Kaplan & Norton 1996, Interpreting Argyris, 1982)

2.10 Steps in Implementation of Balance Scorecard

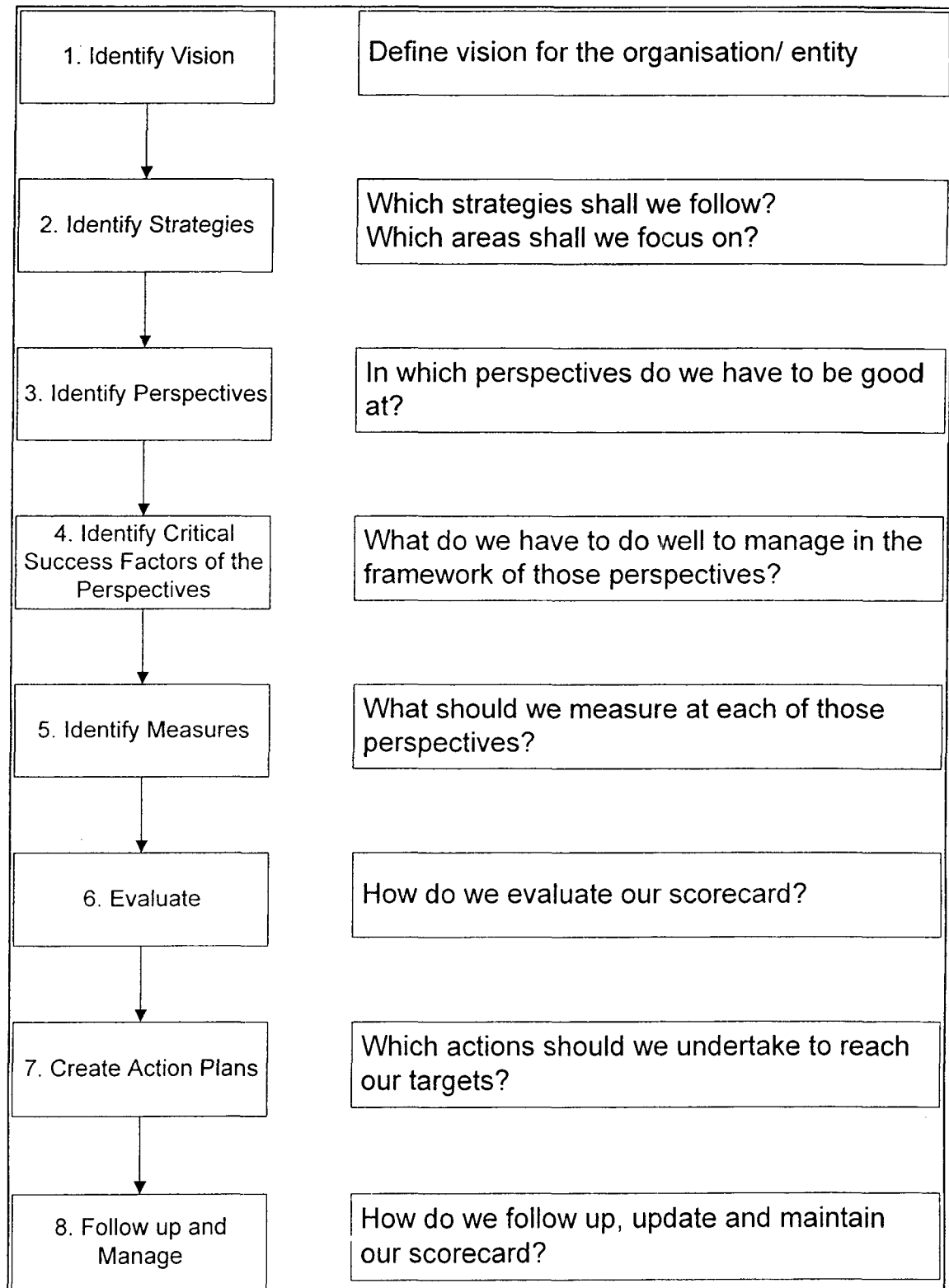
One of the possible ways to go through all the steps of construction of successfully operating Balanced Scorecard might be shortly described as seen on Figure 3 - Creating a Balanced Scorecard.

- First, members of the organisation would have to identify a vision. Everybody in the organisation has to agree upon one single goal where the organisation has to be heading.
- Then organisation's management has to recognise the strategies that will tell how to reach the vision.
- Then the perspectives have to be identified. In some businesses, not necessarily all four are relevant. In some areas, additional perspectives need to be measured.
- Financial perspective (how do we look to our shareholders?)
- Customer's perspective (how do we look to our customers?)
- Internal business process perspective (what processes do we have to be good at?)
- Learning and growth perspective (how will we sustain our ability to improve and change?)
- Then critical success factors for all the perspectives have to be found out. Example: for customers we have to deliver on time, financially we have to be cost-efficient, on the development side we have to produce X amount of new ideas every week etc.
- After the critical success factors are in place, they have to be measured some how, therefore all the measurement systems have to be figured out.

- The next step is to go through appraisal of the established draft Balanced Scorecard to identify whether it would start measuring the right things and assist the management to steer the organisation to the right direction. It might be advisable to establish a test field to simulate how the Balanced Scorecard would start to respond to the actions taken.
- Based on the preparatory work the detailed action plans should be created and proper reporting systems have to be established to start operation of the Balanced Scorecard.
- Finally, it has to be remembered that the Balanced Scorecard is not a "finished product". It has to be amended, improved and changed whenever there is a need for the organisation to change something in its vision or strategic goals.

It has been explained how to manage the construction of the Balanced Scorecard step-by-step. It has to be borne in mind that the actual set-up of a particular Balanced Scorecard may vary from organisation to organisation because of very close linkages to particular establishment's main functions, vision and strategy. For public non-profit organisations, for instance, it would be necessary to replace financial part of the section of Balanced Scorecard with employee empowerment perspective. Some other organisations may need to add additional features to their Balanced Scorecard.

Figure 2.4 Steps in Implementation of Balance Scorecard



Source: Balanced Scorecard Institute, 1998-2009

2.10 Establishing Strategy by Building up a Balanced Scorecard

Balance Scorecard relates with the making strategy to implement. It involves the number of steps to follow. These steps are as follows:

2.11.1 Clarifying and Translating the Vision and Strategy

As each organisation is unique and so follows its own path for building a Balanced Scorecard. From the management point of view it is also not particularly foreseen – it might be set up using the standard project management techniques (preparation-interviews-workshops-implementation-reviews) or be managed by a special unit that is coordinating the overall implementation. The first task in building up the Balanced Scorecard is clarifying and translating company's vision and strategic goals.

The overall purpose of the strategic management is to find a single priority long-term goal which would serve as a basis in resource allocation and organisational development. According to the Balanced Scorecard methodology, the first item that the senior executives of a particular company should consider is the financial goal. The executive team may decide whether to head for revenues or market growth, profitability or cash flow generation.

The ABC of the strategic management suggests that there should be a structure to strategy development that managers should follow. One systemised possibility of strategic management tools is the acronym MOST (Mission, Objectives, Strategy and Tactics). First, strategists should choose a mission – a long-term purpose for the organisation. Then they should define short- and mid-term objectives that will move the organisation on a path towards the mission. A strategy can then be developed to achieve the objectives using short-term operating decisions, in other words – tactics, to implement the strategy.

But the process of developing a winning strategy is much more messy, experimental, and iterative than those simple models foresee. For example, to build up a Balanced Scorecard's customer-perspective, a company's top

executives may agree upon providing superior service to its customers. As such, the vision is quite straightforward and easy to understand for everybody. In formulating the customer objective to the Balanced Scorecard, however, it might become clear, that each executive has a totally different understanding on A) what a superior service is, and B) who are the specific clients that it is going to be targeted at. The executives may thereafter decide who the most desirable customer segment to the company is and which area of services it might be offered.

After the organisation has established its financial and customer objectives, it then identifies the strategic objectives and measures for its internal business processes area. This must be done in close co-operation with middle-level or operations managers to ensure that the processes are in line with current possibilities of resource allocation.

The final link to be envisaged is learning and growth perspective, which reveals the rationale for investments in training employees, in information technology and systems that deal with research and development. (Libby, Salterio, & Webb, 2004).

2.11.2 Communicating and Linking Strategic Objectives and Measures

The next task is to inform all levels of the organisation about the initiative of establishing the Balanced Scorecard. The communication serves three-fold goal. It forwards information to all employees about the critical objectives that must be accomplished if an organisation's strategy is to succeed. Second, the employees need to analyse what changes need to be made in current management of the customer relations, internal business processes, and knowledge management. For example, a strategic initiative to reduce product delivery might be translated into a Balanced Scorecard objective to reduce set-up times at a specific machine, or to a goal for rapid transfer of orders from one process to next, or fully entering into just-in-time concept. In this way, local improvement efforts become aligned with overall organisational success factors. Thirdly, it encourages

dialogue back from business unit to executive teams, not just about the sole implementation of the strategy but about the continuous future strategy development.

At the final stage of the communication and linkage process, everybody in the organisation should understand the business unit's long-term goals, as well as the strategy for achieving these goals.

The main aim of the communication and linking initiative is to let the middle management define their internal business processes. For example: to satisfy the goal of increasing the market share by 20 per cent we need to bring x new products to the market with a targeted marketing campaign. The second aim is to let middle management establish its learning and growth objectives. For example: to increase the market share, we have to train our sales people and increase productivity by establishing a Research and Development department.

Throughout communicating and linking phase, it is worth paying attention also to the question on how to link salary bonus system or other motivation systems to the achievement of goals. It might be recommended that the Balanced Scorecard could be used as a single basis for bonus system. For example, sixty per cent of bonuses of middle management might be based on financial measures (such as profit, return on investment) and the rest of the bonuses might be based on customer satisfaction, partner satisfaction or productivity or turnover of its subordinates.

Individuals at business unit level should have formulated local actions that contribute to achieving overall company's objectives.

All the organisational efforts and initiatives should be aligned to the needed change processes, as the ideal corporate strategy should be set up bearing in mind the principle that every decision has to support the achievement of strategic objectives. All other decisions are either wrong or irrelevant. (Marr, & Neely, 2003)

2.11.3 Planning, Setting Targets and Aligning Strategic Initiatives

The third management task to do is to drive organisational change. The executive team should establish targets for the Balanced Scorecard measures that will transform the company. The targets should represent a discontinuity in the performance of business units. In other words, the goals to be set have to be so-called BHAG-s (big, hairy, audacious goal). One might dream of making his brand more popular than Coke, another aspires to create the most lucrative Web site in cyberspace. To achieve such ambitions financial or customer or trademark objectives, managers must identify stretch targets for their customer, internal-business-process, and learning and growth objectives. These targets can come from several sources. It is possible to use benchmarking, brainstorming etc.

Once targets are established, managers can align their strategic quality, response time and re-engineering initiatives for achieving the breakthrough objectives. Thus, the Balanced Scorecard provides the front-end justification, as well as focus and integration for continuous improvement, re-engineering, and transformation programmes. (Banker, Chang, and Pizzini, 2004)

To distinct from simple slogans of business re-engineering and other management fads, it has to be kept in mind that all those initiatives have to be analysed and identified whether they are critical to company's strategic success. It is a way of continuous series of cause-and-effect work embodied with the Balanced Scorecard; those capabilities eventually have to become translated into the overall strategy. Company may have to tackle with a series of serious constraints in doing so.

Many organisations may encounter usual problems that they have established vision and strategic objectives but to fulfill them they are unable to find particular methods. By using Balanced Scorecard in close connection with budgetary process, it can be assured that all the tasks that are necessary to achieve objectives will also receive the necessary funding.

The Balanced Scorecard also enables a fundamental change in letting the organisation to integrate its strategic planning with its annual budgeting process. At the time when a business establishes 3-5 year stretch targets for the strategic measures, managers may also forecast milestones for each measure during the next fiscal year.

The second possibility is to monthly analyse all the operations and their accordance to fulfillment of strategies and responding funding.

Overall, the initiative should achieve that:

- Long-term outcomes are quantified;
- Mechanisms for fulfillment those outcomes are identified and possess the necessary financing and
- Short-term milestones have been set for the financial and non-financial measures of the Balanced Scorecard.

It might be advisable to analyse the possibilities of using various catalytic mechanisms to drive performance of the company. (DeBusk, Brown, and Killough, 2003),

2.11.4 Enhancing Strategic Feedback and Learning

The last management process embeds the Balanced Scorecard in a strategic learning framework. This process might be considered the most innovative and most important aspect of the entire Balanced Scorecard management process. This provides the capability for organisational learning at all levels. Managers in organisations today do not have a procedure to receive feedback about their strategy and to test the hypotheses on which the strategy is based. The Balanced Scorecard enables them to monitor and adjust the implementation of their strategy, and, if necessary, to make fundamental changes in the strategy itself. (Kaplan and Norton, 1992)

One of the main distinctive qualities of the Balanced Scorecard is to give constant response about achievement of strategic and short-term objectives. Some ten years ago, it was customary to do strategic decisions about once in three months. As today's business environment is so rapidly changing, it is necessary to take strategic decisions in fact, every day to safeguard the flexibility to changes in the market.

First, it makes possible to rephrase so-called shared vision, where the opinions of all the levels of the organisation could be taken account in defining strategic goals and methods on achieving those.

Second, it gives continuous strategic response to the managing team. By foreseeing short-term milestones, it might be necessary to amend long-term strategy's timeline and contents, as the latter may be either too optimistic or too pessimistic. (Crilley and Sharp, 2006)

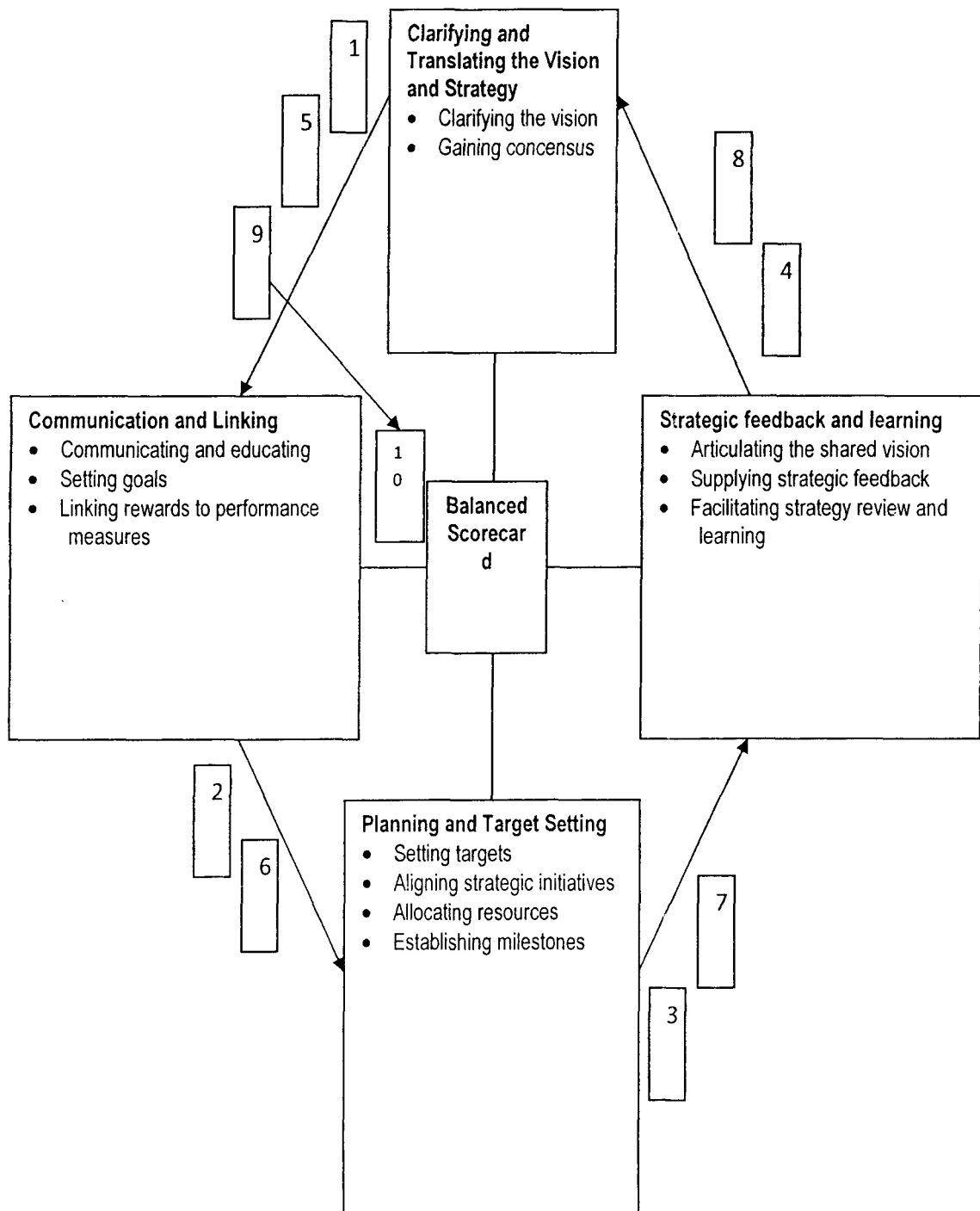
Third, it speeds up the process of finding the cause-and-effect relationships between different Balanced Scorecard components. For example: working morale may have a very strong impact on client satisfaction, which could be unknown for the senior management. This in turn may lead to discovery of new cause-and-effect relationships. For example: between client satisfaction rate and the speediness of submitting invoices. Finding all kinds of correlations definitely helps to clarify and improve the content of strategic goals and tactical steps.

To be more specific, the goal of the process is to establish an ongoing and continuous improvement cycle, the first step is the clarification of a shared vision that the entire organisation wants to achieve. The use of measurement as a language helps translate complex and frequently nebulous concepts into a more precise form that can gain consensus among senior executives. The communication and alignment process, the second process in the Figure 2, mobilises all individuals into actions directed at attaining organisational objectives. The emphasis on cause and effect in constructing a scorecard introduces dynamic systems thinking. It enables individuals in various parts of an

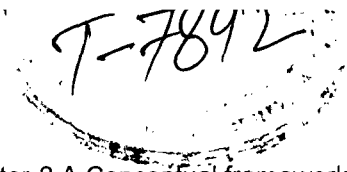
organisation to understand how the pieces fit together, how their role influences others and, eventually, the entire organisation. The planning, target setting, and strategic initiative process – the third process in the Figure 2 – defines specific, quantitative performance goals for the organisation across a balanced set of outcomes and performance drivers. A comparison of the desired performance goals with current levels establishes the performance gap that strategic initiatives can be designed to close. Thus the Balanced Scorecard not only measures, but also even fosters change. The first three critical management processes are vital for implementing a strategy, but they alone would not be adequate in the real world. (Henderson, Young and Mittl, 2001)

Thus, the learning and growth initiative has to be carried out in order to ensure continuous improvement. That kind of continuous improvement may remind also Deming's so-called Plan-Do-Check-Act cycle. Figure 2.5 – Depicts the Possible Steps to go around the Balanced Scorecard:

Figure 2.5 Possible Steps to Go Around the Balanced Scorecard



Source: Kaplan, Robert S. and Norton, David P, 1996



2.11 Testing the Balanced Scorecard

Introducing the balance Score card Approach involves a systematic preparation right from introduction to its implementation. Finally the result obtained can also be tested in the following ways:

2.12.1 Analysing Outcomes and Performance Drivers

All Balanced Scorecards use certain generic measures. These generic, or core outcome, measures reflect the common goals of many strategies, as well as similar structures across industries and companies. The generic measures include profitability, market share, customer satisfaction, customer retention, and employee skills. The drivers of performance are the ones that tend to be unique for a particular business unit. The performance drivers reflect the uniqueness of the business unit's strategy: the drivers of profitability, the market segments in which the unit chooses to compete, the value propositions delivered to customers in the targeted market segments, and the particular internal processes and learning and growth capabilities that enable the financial and customer objectives to be achieved.

A good Balanced Scorecard should have a mix of core outcome measures and performance drivers. Outcome measures without performance drivers do not communicate how the outcomes are to be achieved. They also do not provide an early indication about whether the strategy is being implemented successfully.

Conversely, performance drivers (such as cycle times and part-per million defect rates) without outcome measures may enable the business unit to achieve short-term operational improvements, but will fail to reveal whether the operational improvements have been translated into expanded business with existing and new customers-and, eventually, into enhanced financial performance. A good Balanced Scorecard should have an appropriate mix of core outcome measures and the performance drivers of these outcomes. (Frederickson, Pfeffer, and Pratt, 1999),

2.12.2 Analysing Cause and Effect

A strategy is a set of hypotheses about cause and effect. Cause and effect relationships can be expressed by a sequence of if-then statements. For example, the organisation can establish a link between improved sales training of employees to higher profits through the following sequence of hypotheses. If organisation increases employee training about products, then they will become more knowledgeable about the full range of products they can sell. If employees are more knowledgeable about products, then their sales effectiveness will improve. If their sales effectiveness improves, then the average margins of the products they sell will increase.

A properly constructed Scorecard should tell the story of the business unit's strategy. The measurement system should make the relationships (hypotheses) among objectives (and measures) in the various perspectives explicit so that they can be managed and validated. (Lipe, and Salterio, 2000),

The chain of cause and effect should pervade all four perspectives of a Balanced Scorecard. For example, return on capital employed (ROCE) may be an outcome measure in the financial perspective. The driver of this financial measure could be repeat and expanded sales from existing customers, the result of a high degree of loyalty among existing customers. So, customer loyalty gets put on the Scorecard (in the Customer perspective) because it is expected to have a strong influence on ROCE. How will the organisation achieve customer loyalty? Analysis of customer preferences may reveal that on-time delivery (OTD) of orders is highly valued by customers. Thus, improved OTD is expected to lead to higher customer loyalty which, in turn, is expected to lead to higher financial performance. So both customer loyalty and OTD are incorporated into the customer perspective of the Scorecard.

The process continues by asking what internal processes must the company excel at to achieve exceptional on-time-delivery. To achieve improved OTD, the business may need to achieve short cycle times in operating processes and high-

quality internal processes, both factors that could be Scorecard measures in the internal perspective. And how do organisations improve the quality and reduce the cycle times of their internal processes? By training and improving the skills of their operating employees, an objective that would be a candidate for the learning and growth perspective.

In a very similar vein, recent work in the service profit chain has emphasised the causal relationships among employee satisfaction, customer satisfaction, customer loyalty, market share, and, eventually, financial performance.

2.12.3 Establishing Action Plan for Balance Scorecard

To implement the Balance Scorecard, an action plan is required. Making action plan is not a simple and single thing. In order to get the fruitful results by the use of Balance Scorecard, a systematic plan is required. (Balser, & Stern, 1999)

2.13 Common Problems in Balance Scorecard Implementation

This section will cover the common pitfalls when implementing and working with the BSC. The common pitfalls are divided into design failures, process failures Technological pitfalls and end up with the Major disadvantages of standard spreadsheet documents.

2.13.1 Design failures

The design failures are defined as the failures made on the actual design of the Balanced Scorecard (Kaplan & Norton, 2001):

- Too few, too many measures - Failure to obtain a balance between the outcomes they are trying to achieve and the performance drivers of those outcomes.
- Incorrect drivers of the desired organizational outcomes. However, even if these pitfalls are common, Kaplan and Norton (2001) argue that organizations that work intensively with their strategy do not often fall into these kinds of pitfalls.

2.13.2 Process failures

The most common causes of implementation failures are poorly organizational processes and not design failures. Thus more attention has been paid to them, and these causes of implementation failures include the following (Kaplan & Norton, 2001):

- Lack of senior management commitment - Delegation of the BSC-work to a middle-management team. Strategy is about doing the right things (senior management task) and not about doing things right (middle management task).
- Too few individuals involved - When a single senior executive builds the BSC by himself and does not involve the rest of the top management team.
- Keeping the scorecard on the top - The opposite error of not involving the senior executives, is only involving the top management team. The goal is to have everyone in the organization understand the strategy and contribute to implementing it.
- Too long a development process, treating the BSC as a onetime event - A too long development process is often the result of striving to produce a perfect BSC, straight away. The most successful implementation of the balance scorecard starts with some measurements missing while the management activities based their agenda on the BSC.
- Treating the balanced score card as a System Project rather than a management project - System project: Implementing an IS and dedicating all attention to the IS instead of designing an real scorecard based on the company strategy, management project, which in turn leads to a higher degree of system usage once the management project is completed. This is something that is common when external consultants are in charge of the BSC implementation.
- Hiring Inexperienced Consultants - One of the biggest problems when implementing the BSC is inexperienced consultants.

- Introducing the balance scorecard only for compensation - To skip the strategy translation part of the scorecard process and introduce only new non-financial measures to their existing incentive compensation plan.(Kaplan, & Norton, 1993)

2.13.3 Technological Problems

Keith and Manzione (2007) argue that the greatest obstacle to successfully implementing the BSC is not the methodology, but the technology platform that supports the process. The authors have identified two major technological pitfalls (Keith & Manzione, 2007):

- Low-tech applications – The usage of desktop applications such as spreadsheet applications are not standardized within or across business units resulting in a multiple use of unsynchronized documents. This leads to different performance management processes within business units with complicated and time consuming forms and templates to fill out.
- Robust but inflexible applications – Common in “off the shelf” platforms where the system is highly scalable but with limited customization abilities. The organization becomes forced to live with the systems default terminology which can be foreign and confusing if it does not fit the organizational context. If the terminology cannot be linked to the strategic reporting system the BSC loses its original meaning of strategy diffusion.

2.14 Conclusions

From the possible research resources from Internet and major international business journals, it was possible to identify that throughout the world has the Balanced Scorecard received very warm welcome among numerous very prestigious companies. To mention just a fraction of them: Chase Manhattan, Hewlett-Packard, IBM, FMC Corporation, Mobil, Shell, Sears, Texaco. The number is constantly growing every day. (Kaplan, Robert and Norton, David, 1996)

The Balanced Scorecard is definitely a useful tool to renew an organisation's mission and strategic objectives. Multilevel analysis of organisational strategy helps to identify possible shortcomings and flaws of existing objectives.

Second, the Balanced Scorecard has proven its usefulness also as a two-way communications tool that enables to pass information more easily to all the members of an organisation, as every member's task in formulating the core business information is certainly much higher than in the case of centralised strategic management systems. At the same time, the Balanced Scorecard simplifies the analysis of monthly performance review and compares the results of the review with strategic objectives.

Third, it turns the activities of an organisation much more efficient as its every member is more aware and committed to the strategy. In the end, it avoids performing many tasks that are not in line with objectives and members start to diminish less important assignments that do not contribute to goals.

As one of negative impacts of the Balanced Scorecard it may be noted slowing down of some strategic planning processes, because discussions on so many levels of management undoubtedly takes some time. The second problem is increasing time constraints, because some increase in bureaucracy and increase in reporting.

Chapter-3

A Brief Profile of Jordanian universities

3.1 Introduction

3.2 Policy of Higher Education in Jordan

3.3 Principles of Educational Policy in Jordan

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Chapter 3

3.1 Introduction

The analysis of the conceptual framework of human resource development and balance scorecard have been analyzed in detail in the chapter 1 and 2. Now, the higher education system, educational policies for higher education in Jordan and the universities which are covered in the present study are described with some important facts and information. These universities are of national importance.

The importance of university stems from the fact that it is responsible for preparing intellectual, scientific, literacy, artistic and professional leaderships at different levels and for all institutions of society and sectors. University is basically responsible for conducting researches and studies at all fields of life and domains of knowledge. University also has an important role in the field of public service in society by offering practical services to society on the part of teaching staff and students, utilizing its various facilities. The most prominent problems which face Jordanian society are: firstly, the continuous cultural and ideological modernization coming from the West and the Palestinians of conflict among three ideologies: Islamic, communist and capital. Secondly, the continuous scientific and technologies challenge coming from the west and the east and the needs of the Jordanian society for the different experiences and skills of advanced societies. In this way, the west and the east control the offering of advanced appliances and industries to Jordan according to certain conditions. Thirdly, the occurrence of social, economic and political problems resulting from the rapid progress accompanied by an imbalance between the values and aims imposed by the material progress and the host of values and aims polarized the interaction of the ideological heritage and society needs. Fourthly, the development of new intellectual and faith currents within Jordanian society, one of them tries to assert the identity of the Arab-Islamic society, and the other tries to borrow the western or eastern solutions resulting from the material progress.

Each of them has its philosophy which supports its positions and manner of treatment.

3.2 Policy of Higher Education in Jordan

The higher education in Jordan is being defined according to the law of higher education Act No 28 of the year 1985 as “the Education that is not less than one full Academic year after secondary stage”. And according to the same Act the institution of higher education is defined as the “institution which is conducting higher education in Jordan, including universities, higher institutes and the community’s colleges and institutes.”

3.3 Principles of Educational Policy in Jordan: The principles of Educational policy in Jordan are as follows: (www.jordanwatch.net)

- Guiding the educational system to be in much conformity with the needs of the individual and society and to reach balance between them.
- Providing opportunities to achieve the principles of sustainable education and to exploit the types of parallel education in coordination with authorized parties.
- Emphasizing the importance of political education in the educational system, consolidating and practicing the principles of participation justice and democracy.
- Guiding the educational process in a way that develops in the citizens’ personality the ability to analyze, criticize, initiate, create, and have positive dialogue and to reinforce the values originating from the Arab, Islamic and Humanitarian civilization.
- Firmly establishing the scientific approach of educational system in regard to planning, execution assessment and developing research, assessment and prosecution systems.
- Expanding the types of education in educational institutions to include the program of special education and talented students.

- Emphasizing the concept of comprehensive experience to include professional and technological experience.
- Emphasizing the fact that education is a mission and a profession which has its ethical and professional rules.
- Guiding the educational system in a way that insures the centralization of general planning and the de-centralization of management.
- Cherishing scientific and social position of the teacher and his/her distinctive role in building the human being and society. And
- Emphasizing the importance of military education and environmental culture.

3.4 The Means of Implementing the Policy of Higher Education: The ministry of higher education was established in 1985 to take up control of the educational, cultural, instructional and scientific policy of the government within the scale of the institutions of higher education. Its aims are achieved under the regulations of higher education 1985 through the following means: (www.fncfcs.com)

- Integrated scientific planning of higher education in the light of needs of society, including the planning for establishing the institutions of higher education and determining the type, level and degree of this education.
- Supporting the autonomy of universities through their council and departments and co-ordination between them in different fields.
- Direct supervision of non university education to prepare well trained human powers required for development plans and co-operation with other ministries, committees and institutions which have the same tasks.
- Providing human and technical potentials for the institutions of higher education to promote the level of scientific research expand its domains and co-ordination, with the co-operation of concerned institutions and committees.
- Holding agreements related to higher education and exchange of information with Arab and other countries, and representing Jordan in conferences and local and foreign meetings related to higher education.

- Organizing the affairs of students, professors, researchers and scientific delegates coming to Jordan from other countries in co-operation with concerned parties.
- Organizing the work of the offices of student's services, supervising their affairs and evaluating their performance.
- Preparing studies and projects and offering initiatives in regard to what concerns higher education and its development in Jordan.

3.5 The Public Sector Universities in Jordan:

The Universities are primarily considered to be responsible for conducting research and studies in all areas of knowledge and also life. The universities play an important role in public service of the society. Successive Jordanian Governments have recommended the establishment of universities and work to develop and provide full support to them through directions and orientations of His Majesty the late King Hussain. Thus, the first university in Jordan was established in 1962 and then many public and private universities were established in the kingdom totaling 26 in the year 2007; of them ten are public universities and sixteen are private universities, among them four universities are specialized in postgraduate studies. The government has issued a series of laws concerning higher education and Jordanian universities. The Uniform Code of universities Act 29 of 1987 confirmed that the university is a national institution of higher education and scientific research that aimed at: firstly, to disseminate knowledge, develop and contribute to the progress of human thought. Secondly, providing opportunities of university education theoretical and applied to the qualified students and researchers. Thirdly, encouraging scientific research and development of scientific curriculum, intellectual independence, and personal initiative and developing sense of belonging to the nation and the spirit of responsibility and teamwork. Fifthly, deepen of the Islamic faith, spiritual, moral and also paying care towards Arab civilization and Islamic heritage. Sixthly,

providing service to the Jordanian society and its needs and contribute to the service of the Arab society. Public Sector Universities in Jordan are listed below:

- University of Jordan
- Yarmouk University
- Mu'tah University
- Jordan University of Science & Technology
- Al al-Bayt University
- The Hashemite University
- AL-Balqa Applied University
- AL-Hussein Bin Talal University
- Al-Tafila technical University
- German-Jordanian University

As per the scope of the present study, Public Sector Universities have been described as under:-

3.5 University of Jordan (Government)

The University of Jordan is both a modern as well as old institution of Higher Education in Jordan. The University of Jordan is a government-supported University located in Amman- Jordan. Founded in 1962, it is the largest and oldest university in the hashemite kingdom of Jordan. The university employs 2700 of faculty staff and has more than 38,000 enrolled students.

It is located in the Jubaiha area, District of University, Amman. The University of Jordan has the highest admission averages in the country and is considered the premier university in Jordan and one of the most prestigious in the Arab World.

3.6.1 Faculties:

At the undergraduate level, students have the choice to select from among 63 different programs in the Arts, Business Administration, Science, Shari'a (Islamic Studies), Medicine, Nursing, Agriculture, Educational Sciences, Engineering and

Technology, Law, Physical Education, Pharmacy, Dentistry, Humanities and Social Sciences, Rehabilitation Sciences, Information Technology and, most recently, Arts and Design. For those interested in graduate education, the University offers 30 doctoral programs, 81 Master's programs, 16 programs in Higher Specialization in Medicine, one program in Higher Specialization in Dentistry, 3 Professional Diploma Programs, and 6 interdisciplinary Master's programs across the wide spectrum of academic disciplines.

From an international perspective, the University offers 63 international programs at the undergraduate level, and 130 international programs at the graduate level and in all fields of specializations. In its capacity as a comprehensive teaching, research and community-service institution, the University of Jordan enables its students to choose from a wide range of programs- more than 3500 different courses are offered by some 18 faculties. The University of Jordan is divided into the following 18 faculties:

- Faculty of Arts
- Faculty of Business
- Faculty of Science
- Faculty of Shari'a (Islamic Studies)
- Faculty of Medicine
- Faculty of Nursing
- Faculty of Agriculture
- Faculty of Educational Sciences
- Faculty of Engineering & Technology
- Faculty of Law

- Faculty of Physical Education
- Faculty of Pharmacy
- Faculty of Dentistry
- Faculty of Humanities & Social Sciences
- Faculty of Graduate Studies
- Faculty of Rehabilitation Sciences
- King Abdullah II School for Information Technology
- Faculty of Arts and Design

3.6.2 Mission:

The University of Jordan's educational mission is based on the following pillars:

- The provision of quality education at both the undergraduate and graduate levels.
- The adoption of the principle of democracy in the education and decision-making processes.
- Interaction among students, with the local community, and at the international level, and
- Support of goal-oriented research, particularly research activities which are in line with the national development plans. It has a number of faculties of different fields, such as, The Faculties of the university are. Medicine, Dentistry, Pharmacy, Nursing, Engineering and Technology, Science, Business Administration. Law, Shari'a (Islamic Studies), Humanities and Social Sciences, Educational Sciences, Rehabilitation Sciences, Agriculture, Physical Education, Arts, Information Technology, Graduate Studies (FGS).

The University of Jordan launched its first graduate program after six years of its establishment (1968/69). This was an MA program in Educational Administration and Guidance, to be followed, three years later, by an MA Program in History. The University gathered momentum in the second decade of its life; new faculties were established and it started to pay more attention to research and graduate studies. This was reflected in launching eight new graduate programs in the academic years 1972/73 and 1973/74. To administer these graduate programs, the Deanship of Research and Graduate Studies, as of 1984 the Faculty of Graduate Studies, was established in 1973 with the following aims:

- To increase human knowledge,
- To lay foundations for research in the University,
- To develop students' capabilities in research methodology in all fields,
- To graduate specialists of high standards to help in national development,
- To direct studies toward local, regional and Arab problems. The Faculty of Graduate Studies admits students from many Arab and foreign countries either through the International Graduate Program or through cultural exchange programs.

3.6.3 Infrastructure:

Many current and former staff members head important academic, administrative, and political establishments in the Kingdom; many have served as ministers in a number of government cabinets, top advisers to the Jordanian leadership, members of Parliament, and presidents of Jordanian public and private universities. Among its more than 1086 faculty members are freelance writers in the national newspapers and magazines as well as consultants for the radio and TV stations, poets, novelists, short-story writers, and literary critics. Many have also offered their services to some neighboring Arab and Muslim countries, and many teach or have taught at a number of prestigious universities

all over the world. Most faculty members are active participants in conferences, workshops, and symposia abroad; and most take advantage of the various research and exchange awards. Given the global outlook, the progressive thinking and diverse background, these faculty members shoulder the responsibility of delivering a quality education to the 38,000 students who are pursuing a wide variety of undergraduate and graduate programs.

The Table 3.1 Shows that the academic staff of the University for the Year 2005/2006. It is observed the University of Jordan has the largest rank of academic staff of 352 assistant professors, followed by 331 full Professors, 222 associate professors, whereas, the other reaming ranks, have the lowest academic staff in order, 91 lecturers, 79 teaching and research assistants, and 54 instructors, during the academic year 2005/2006.

Table 3.1 Academic staff of the Public University

	Name of Universities	Full Prof.	Associate Prof.	Assistant Prof.	Instructor	Lecturer	Res. Ass.	Total
1	The University of Jordan	331	222	352	54	91	79	1129
2	Yarmouk University	206	176	205	116	0	67	770
3	Mu'tah University	106	149	152	22	96	13	538
4	Jordan University of Science & Technology	97	153	282	3	138	15	688
5	AL al - Bayt University	17	19	138	55	0	0	229
6	The Hashemite University	38	45	200	24	50	88	445
7	Al-Balqa' Applied University	22	29	113	51	14	73	302
8	Al-Hussain Bin Talal University	6	15	67	9	15	6	118
9	Tafila Technical University	3	14	40	20	20	21	118
10	German Jordanian University	3	2	5	0	8	0	18

Source: compiled from the websites of different universities, 2008

3.6.4 University Library

The University of Jordan's main Library was established in 1962 and it has been endowed with major attention. Providing it with a qualified technical staff and the required financial shares, have contributed in establishing it as a pioneer library in both the Arab World and the Middle East region. More than 800,000 library titles are available in forms of books, periodicals, theses, microfilms besides a number of audiovisual materials. The library offers a number of services for the university members, the students, the academic and administrative staff as well as researchers from outside university and the local community. It opens its doors to offer its daily services to visitors range between 5000 and 10000 a day. The library has undergone an automation project offering a computerized system of acquisition, borrowing and returning books. Through its effort to enhance the role of technology in modern libraries, UJ library has activated the project of the e-library by allocating certain databases for subject-heading search, thesis abstracts search, the UJ educational publishing search including studies, and the educational magazines. It has recently undergone a project of providing a full-text search for theses defended since 2002.

By coping with the latest technological events to maintain service in providing all kinds of information resources that cover all sorts of disciplines available at the faculties of the University of Jordan, we can ensure the easiest and the most efficient access to all of the library items. Working on our vision to see the light, we have recently signed an agreement with the official Jordanian universities to form a Consortium that combines all of the universities libraries under the name of "Jordanian Center of Excellence for public University Library Services" located at Yarmouk University. The aim of the Consortium is to manage Jordanian universities libraries information network and coordinate its services for multi-economical- purposes (expenditure rationalization, information resource sharing and unifying mechanism for library work among the member libraries. Thus was

the choice of a new library system namely, Horizon to be installed in the year of 2006. (www.ju.edu.jo)

3.7 Al- Balqa' Applied University (BAU) Government Undertaking:

Al- Balqa' Applied University (BAU) was founded in 1997, a distinctive state university in the field of Bachelor and Associate degree Applied Education, at the capacity of 21,246 student distributed into 10,000 at the Bachelor degree program and 11,000 at the Associate degree program.

3.7.1 Students: 21,246 student distributed into 10,000 at the Bachelor degree program and 11,000 at the Associate degree program.

3.7.2 Faculties: To cater the education in different fields the university is providing education in the following areas:

- Faculty of Applied Sciences
- Faculty of Engineering
- Faculty of Technological Agriculture
- Faculty of Planning & Management
- Faculty of Graduate Studies & Scientific Research
- Traditional Islamic Arts Institute.

3.7.3 BAU's University Colleges & Community Colleges:

Technological Engineering College , Usul Al-Deen University College ,Tafilah Applied University College , Princess Rahma University College, Al- Hosun University College , Ajloun University College , Princess Alia University College , Aqaba University College , Amman University College, Irbid University College ,

Zarqa University College , Al- Salt College , Karak College , Ma'an College , Shobak College and the Royal Jordanian Geographic Center College .

BAU supervises academically, educationally, technically all the private, military and the United Nations International Relief Organization (UNRWA) subsidiary community colleges, estimated in (34) college.

The number of the academic majors in BAU reached (12) majors at Master's degree program level, (3) majors at High Diploma degree level, (47) majors at Bachelor degree level and (88) majors at the Associate degree level.

3.7.4 BAU awards academic degrees and certificates:

Associate, Bachelor, High Diploma and Master's degree certificates.

3.7.5 BAU's University Colleges & Community Colleges:

Technological Engineering College, Usul Al-Deen University College, Tafilah Applied University College, Princess Rahma University College, Al- Hosun University College, Ajloun University College, Princess Alia University College, Aqaba University College, Amman University College for Financial & Administrative Sciences, Irbid University College, Zarqa University College, Al-Salt College, Karak College, Ma'an College, Shobak College and the Royal Jordanian Geographic Center College.

BAU supervises academically, educationally, technically the entire private, military and the United Nations International Relief Organization (UNRWA) subsidiary community Colleges, estimated in (35) College.

3.7.6 BAU's Private Community Colleges:

BAU supervises academically, educationally, technically the entire private, military and the United Nations International Relief Organization (UNRWA) subsidiary community Colleges, estimated in (35) College.

3.7.7 The Library:

The library offers faculty members, staff, students and the local community with different sources of information; it works at organizing and filling this material for easy and expedient retrieval. The library offers the following services:

- Lending books.
- Maintaining books and other sources of information in the library.
- Conducting studies related to its work.
- Developing the performance of the staff as well as that of other librarians in the local community through training courses.
- Supporting newly established libraries through book exchanges and counseling.
- Holding book exhibitions on campus and in the local community.
- The library holds around 24.500 books of which 17.500 are in Arabic and 7000 are in English.
- It is also subscribed to 150 scientific periodicals and is home to 50 complementary periodicals from different sources.
- It also has around 315 CD ROMs and 1409 disks.

The library consists of the following Sections:

- Acquisition Section.

- Cataloging and Classification Section.
- Periodicals Section.
- Circulation Section.
- Computer Section.

3.7.8 Achievements:

The library has held a number of training courses for its employees in the different fields that are related to their work, such as classification, filling and computer courses. It also trains students on library proper usage, looking up resources and so on. Furthermore, it has arrived at a draft of agreement with other Jordanian universities to facilitate inter-lending between libraries in order to provide faculty members and students with all the resources they need. All library services have been computerized to facilitate date search and retrieval.

The library's new building at an approximate 7000 m² is still under construction and holds many reading halls to provide students with larger halls for reading and bigger space for storing books and other sources of information.

3.7.9 BAU Mission:

BAU provides the Jordan Market with distinguished highly qualified graduates fulfilling the demands of the Jordan Market with experts and professional employment accordingly of high standards responds to the exchangeable market's needs technically and systematically.

BAU emphasizes excel value in education through conforming to keep on the process of upgrading the type of management and teaching , providing new equipment facilities , services , academic standards and proceeding in upgrading the quality of graduates and trainees .

BAU is heading towards the applied education strongly, sustain its attitudes towards application heading the advancement and modern changes and coping with era and technology prerequisites, the economic and social life fields relevant to constant implementation in Education, Vocational and Technical Training process in a wide scale guaranteeing an effective participation of the stakeholders and the Industrials in developing management, programs and the educational progress.

BAU's academic programs are flexible enough to permit pioneer students to admit for Bridging Process from Associate level to Bachelor level.

3.8 University of Petra (Private)

University of Petra (UOP) is a private institution established in 1991 under the name of Jordan University for Women (JUW). At that time, JUW was established to serve the female community of Jordan and the region. In 1999, the strategic approach of the University changed to serve both genders of Jordan and the region, and therefore the name has changed to UOP. UOP offers B.Sc. programs in the fields of Humanities, Sciences, Information Technology, Management and Finance, Pharmacy, Nutrition, Architecture and Interior and Graphic Design. In addition, UOP now offers Master's programs in Pharmacy and English Language Translation with more programs are currently being planned.

Since its establishment, UOP endeavored to become a modern educational institution in the region, equipped with notable academic and educational capabilities. The University grants a number of Ph.D. scholarships annually to the distinguished graduates, these awards cover both tuition fees and living expenses. The University also provides a number of grants and financial incentives to its distinguished students and to those who are in need.

UOP is keen to adopt quality assurance schemes to assure the quality of its provisions. This is reflected in its participation with the HFE's SPQA program and

the work of this report to embrace QA measures at the institutional level. In addition, the accountant program has already participated in the HFE review program during 2006. Currently, the computer science program is participating in the HFE review program due in April 2007. Both English language and literature program and the financial science program are also going to participate in this year round of HFE subject review (October 2007), while the pharmacy program is scheduled to participate in next year's round.

3.8.1 Campus and Facilities:

UOP carries the name and the logo of the most important historical cities of the world usually called the "rose-red city". However, the University is located near the center of Amman, the capital of Jordan, 7 km south of the 7th circle off the airport road. The campus is compact with all facilities within easy walking distance. It includes teaching facilities, administrative areas, theaters, a library, a computer center, a clinic, a bank, a mini-supermarket, a restaurant, and a bookstore. These are all grouped in the heart of the campus creating a strong sense of social and academic community. The university's green-field squares contribute to a general feeling of peace and calm. The University is also equipped with a multipurpose sport complex to provide world-class sports facilities, to be used by professional sports teams as well as students and staff. This is in addition to a basketball, volleyball, tennis, and two soccer fields. International female students are offered on-campus accommodation at the university dormitories for their first year of study.

Staffed by qualified nurses and physicians, the on-campus clinic provides free medical, pharmacy and ambulance services. In addition, a health insurance program for all students and staff is available.

3.8.2 Students Profile:

Students are assisted to adapt to University life and culture by the Deanship of Students Affairs (DSA) and the academic advisor. At the start of each academic year, DSA organizes an orientation program for new students, in which seniors, starting with the University's President, address them. They are provided with information on UOP rules and regulations and introduced to facilities therein. The University has a student union, which plays a vital role in helping students to adjust to, and be involved in, university activities. UOP provides transportation services for students for a nominal fee. The University also provides health insurance to all students.

Distribution of enrolled students per faculty 2006/2007:

Faculty	Bachelor		Master	
	Male	Female	Male	Female
Arts and Sciences	454	780	12	17
Architecture and Fine Arts	453	297	-	-
Admin. & Fin. Sciences	1631	483	-	-
Pharmacy & Med. Technology	240	217	8	6
Faculty of Inf. Technology	425	109	-	-
Total	3230	1886	18	25

3.8.3 Library:

The University of Petra's Library is at the forefront of the campus and opens during morning and evening term programs. It has a total area of 5185 square meters. There is seating for over 1500 readers and it is equipped with about 250

PCs, computer workstations and laptop docking points. It has a stock of about 60,000 reference books, around 340 periodicals and subscribes to EBSCO (on-line journal data base) for more journal titles. Further details can be found in Appendix A: Library Holding In addition to the library services, UOP ensures that each faculty and department has its own learning resources to enable the students to make the best use of skills and capabilities. Appendix B: A list of labs around the campus. Lists of 75 labs covering all faculties and departments which require such resources.

The university enjoys a state of the art ICT infrastructure. The university is served by a fast LAN network with high speed routers, fiber optic and wireless connections in certain designated areas. The network is served with the latest blade servers located at the computer center. There are around 1175 PCs on campus and more than 150 printers to serve staff and students. The university has agreements with a number of leading software vendors to avail software packages for teaching purposes. There are around 25 classrooms that are equipped with data shows and internet connections to enrich content delivery. All computers have access to Internet via the university's wide band internet connection through a leased line at a speed of 4Mb/sec. The computer center provides a learning managing system (LMS) named Blackboard and Share Point Portals (both planned to be operational in the near future), and on-line access to student records (for academic guidance purposes). The computer center also acts as the university's webmaster and offers programming services to certain projects.

3.8.4 Vision:

We aspire to be the University of Choice, in Jordan and the region, for learners and scholars.

Mission Statements

3.8.4.1 Universities Purpose:

We aim to play a significant role in the progress of our nation through creating and disseminating knowledge & technology and preparing graduates who can contribute positively towards their communities.

3.8.4.2 Universities Business:

Our mission is to create an academic, cultural and social environment that develops research opportunities; builds-up the competence of our members; provides active community service, and prepares our students to be capable of creative and critical thinking and life long learning, and are able to compete in the marketplace.

3.8.4.3 Universities Values:

In conducting our work, we are guided by the following values:

- Pursue knowledge for the sake of knowledge.
- Equal opportunities to learn and excel.
- Respect for others' opinions.
- Motivate members for life long learning.
- Diversity is the essence of our existence.
- Encourage teamwork and collaboration.
- Treasure creativity and achievements.

- Advocate intellectual freedom.
- Committed to social justice and social responsibility.
- Dedicated to leadership and accountability.

3.8.4.4 Goals

In fulfilling our mission, it seeks to:

- (Governance): Maintain a responsible, accountable and caring leadership and governance that is strategically oriented to lead the university to fulfill its vision and mission optimize the usage of its resources, and sustain its existence.
- (Academic environment & resources): Establish a vibrant scientific environment by providing adequate resources and infrastructure for teaching, learning and the creation and dissemination of knowledge and technology.
- (Cultural environment): Promote intellectual work, creative thinking, freedom of speech, and communal dialog to establish a rich cultural environment that positively contributes to the well-being of the nation.
- (Social environment): Build a happy caring society within the university, with a joyful atmosphere and pleasant working conditions, where members of the university can enjoy performing and contribute positively to their full potential.
- (Quality education: programs, teaching, learning & progression): Provide and promote quality education with suitable variety of well-reviewed programs to turn out graduates of outstanding academic caliber, who are

capable of life long learning, creative and critical thinking and who can successfully progress into further education and market careers.

- (Build-up competence): Create opportunities, programs and incentives that allow university staff members to improve their skills, expertise and proficiency and be promoted.
- (Research & outreach): Avail funds and resources, bridge to the outside world and encourage innovation and novelty to create opportunities of scientific research, novel discoveries, technology transfer, and active participations in conferences and conventions.
- (Community service): Support various scholar and non-scholar initiatives directed to assess and enrich the socio-economical aspects of the local community and the region.

3.9 Al-Ahliyaa Amman University (Private)

Al-Ahliyya Amman University is a university located in Amman, Jordan. It is the leading private university in Jordan. Al Ahliya Amman University is the first privately funded and managed university to be established in Jordan. Since its founding year in 1990, this university has set a role model for launching many other privately owned universities in Jordan and in the Middle East. The Faculty of Information Technology was established in 2001 as a new independent entity of Al-Ahliya Amman University and a regional centre to offer a new breed of academic programs to the local and regional IT community. The faculty currently offers a Bachelor of Science in Computer Science as well as Bachelor of Science in Computer Information Systems.

It is active in the field of private higher education. AU is fully accredited by the Jordanian Council of Higher Education, the only accrediting authority in Jordan.

AU enjoys wide Arab and international recognition, and it is an active member of the Association of Arab Universities.

We believe you have come to the right place, whether you are a student seeking good education, or a faculty member considering a challenging teaching job, or a parent seeking university placement for his or her beloved children. In addition to a healthy and challenging academic atmosphere, we care much to provide for developing within our students a high sense of social and cultural commitments. We are proud of our modern educational facilities and our teaching staff. We invite you to share with us the experience of a truly productive and challenging campus community life.

3.9.1 Faculties: These are the seven academic faculties in which the university is divided into:

- Faculty of Engineering
- Faculty of Nursing
- Faculty of Pharmacy and Medical Sciences
- Faculty of Information Technology
- Faculty of Arts and Human Sciences
- Faculty of Law
- Faculty of Finance and Administrative Sciences

3.9.2 Facilities:

The university also contains:

- Amman University Arena

- Dormitories for female students
- A building that houses a branch of Arab Bank, a clinic and sports halls.
- A mosque
- sports fields

3.9.3 Specializations:

Amman University follows the credit-hour system. In this system, the yearly instruction takes place for the duration of two semesters, 16 weeks each, and one optional summer semester of 8 weeks in duration. Through five academic faculties now in full operation, AU offers the Bachelor's Degree in the following fields of specializations: Nursing- Pharmacy and Medical Sciences, Information Technology Sciences, Computer Information Systems, Computer Science, Program Engineering, Human Sciences and Art , English Language and literature, English Language – Translation, Psychology, Interior Design ,Graphic Design , Law , Finance and Administrative Sciences, Business Administration , Hotel Management and Tourism, Marketing, Finance and Banking Management, Accounting, Management Information System. (www.uop.edu.jo)

3.10 Image of the Private Universities;

The image of the private university in Jordan is a product less of the private universities themselves and more of the prejudice expressed by members of the public university community. Much is made of the fact that students "pay" for their education, and intimations of unfair practices and substandard education abound. Nevertheless, there is no evidence that the private universities are not doing a good job, or in fact that the public universities are doing a better job, and so far the latter have escaped scrutiny in spite of a certain amount of fiscal recklessness. Some resentment arises from the fact that private universities pay better salaries, but this is on a contract basis without the expectation of tenure,

whereas Jordanian faculty members in the public universities are guaranteed employment for life after two years of service (this stipulation does not apply to non-Jordanians) and frequently opt for this security rather than taking the risk associated with a private institution's higher salary. Although rarely mentioned, a substantial number of public university officials and faculty members own shares in private university companies.

The complaint most frequently heard about private universities is that their admissions standards are lower, and at first glance this would seem to be the case. University admission is based on the results of the tawjihi--the General Secondary School Certificate Examination (GSSCE). The qualifying score is 65 percent for public universities and 60 percent for private universities. Actual requirements may be higher in some specializations owing to competition. For example, medicine generally calls for at least an 85 percent score and engineering 80 percent. The GSSCE is given in subject groupings (comparable in concept to the British A-levels) but the largest category by far is the combined total in arts and science. In 1995 a total of 41,000 students took the arts exam, of which 12,000 scored at least 65 percent and 15,000 at least 60 percent; 23,000 took the science exam, of which 13,000 scored at least 65 percent and 15,000 at least 60 percent. (First-year places in the public universities totaled less than 15,000 that year.)

This is not the full picture, however. In the public universities about 25 percent of the available places are reserved for students in special groups who make the qualifying score (65 percent). The "special" list includes children of the armed and security forces and Ministry of Education personnel, applicants from certain foreign countries (not including Malaysia, which has its own separately negotiated quota), and those with waste of one kind or another. This exemption means that the sliding scale of competition does not affect a large number of applicants, and consequently many better qualified students lose their public university slots to the less qualified.

3.11 Problems and Solutions:

The basic problem of private higher education in Jordan is that the private universities were established as a "quick fix" for the mushrooming access deficit in a system without surplus money, and where the existing money was not effectively spent. Furthermore, the development of the private university was restricted to the existing tradition in curriculum and delivery rather than reaching out for innovation and creativity. Recent weeks have seen public addresses given by Crown Prince Hassan, Princess Sarvath, and others signifying potential changes. Probable actions are: professionalizing the Higher Education Council and adding private university representation, improving the management autonomy of both private and public institutions, and establishing an accreditation body for all higher education. With these first steps taken, the private universities may be able to cross the threshold into a new importance in Jordanian higher education. (Dolores L. Burke and Ahmad A. (1997)

Chapter-4

LITERATURE REVIEW AND RESEARCH METHODOLOGY

PART 1: RESEARCH METHODOLOGY

4.1 Introduction

4.2 Research problems

4.3 Studies Related to HRM

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PART 2: RESEARCH METHODOLOGY

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Chapter – 4

LITERATURE REVIEW AND RESEARCH METHODOLOGY

This chapter deals with review of related literature in order to find out the literature gap and identify research problems to conduct present study. This chapter also talks about the research methodology to carry out the research. Part one deals with literature review and part two deals with research methodology.

PART 1: REVIEW OF LITERATURE

4.1 Introduction

Earlier researches uncovered that, despite the relative success of high technology firms, recruitment and retention were potentially limiting growth and competition (Fine, 2000; DeBruyn, 2000). The most current high technology study confirms that acquiring appropriately trained personnel continues to be one of three major challenges facing these firms (High tech study, 2003). An earlier informal survey of 14 companies added compensation and development to the list of issues that confront them (Douglas, 2000). The two regional studies of 87 (Calibre Strategic Services, 2001) and 81 (High tech study, 2003) high technology firms confirmed these latter concerns in the reasons expressed by employees for terminating their employment: higher compensation (19% and 18% respectively) and advancement opportunities (12% and 9% respectively). Other reported reasons included involuntary dismissal, work-life Balanced, permanent employment, interesting work, and personal reasons (Calibre Strategic Services, 2001; High tech study, 2003).

4.2 Research problems

In the light of the above discussed information gap, the purpose of this thesis is to determine the use of Balanced Scorecard Model in Human Resource Management System in the universities and analyze the success of Balanced Scorecard implementation. The broad question is, how can HR system (competencies, reward, training, work organization, performance evaluation

etc.) be structured and related to strategic and financial perspectives in the university system? A highly cohesive HR system may fail if it is not reshaped periodically so as to align with the institutions larger growth strategy. Misalignment between the HR system and strategy implementation system can actually destroy value (Becker et. al, 2001).

It is a general perception that students and staff members are not satisfied with the working of the government universities of Jordan. On the other hand most of the students and staff members are satisfied with the facilities and infrastructure provided by the private universities. For this researcher will answer the following research question:

- How can the utilization of a BSC model increases the success rate of the Balanced Scorecard implementation in HRM?
- Are universities aware of their strategic responsibilities?
- Are universities managing the financial risks or not?
- How is HRM helping universities position themselves to meet the needs of external customers that are students?
- Do the universities have the talent to be successful in the future?
- Is the HR system providing the university with the employee competencies and behavior necessary to achieve overall objectives?
- Whether the internal processing of different procedural work takes much time in completion in government universities than private universities or not?
- .Whether the employees are satisfied or not regarding their promotion as well as their remuneration in government universities?

- How is HRM helping universities position themselves to meet the needs of external customers that are students?
- Are universities aware of their strategic responsibilities?
- Are universities managing their financial resources or not?
- Why are private universities known for their efficiencies as compared to the government universities of Jordan?
- What is the status of performance evaluation of the employees and teachers of the universities of Jordan in the government and private universities?

So the broad question is, how can HR system (competencies, reward, training, work organization, performance evaluation etc.) be structured and strategic and financial perspectives in the university system?

A highly cohesive HR system may pay if it is not reshaped periodically so as to align with the institution's longer growth strategy. Misalignment between the HR system and strategy implementation system can actually destroy value (Becker et al, 2001).

4.3 Studies related to Human Resource Management

Employee behaviours and performance comprise what is evaluated. A key component to understanding employee performance is motivation (Whetten & Cameron, 2002), and an important feature about employee motivation is that it initiates from two sources: extrinsic and intrinsic (Auerbach & Dolan, 1997).

Extrinsic motivators include rewards, which generate from outside the individual and include compensation and other non-financial rewards such as praise or promotion; intrinsic motivators, on the other hand, originate from an individual's internal desire to accomplish something interesting, challenging, or personally satisfying (Beehr 1996; Hunsaker, 2001; Robbins & Langton, 2003). Since

employees differ in the value they assign to rewards, managers need to understand the distinction between these sources and their significance to each employee (Hunsaker, 2001). To assist with management's understanding, there are three prominent OB theories that originate from the organisational psychology field: expectancy theory, organizational behaviour management, and goal-setting theory (Beehr, 1996). All three theories explain what performance behaviour and underscore the influence of management actions on the day-to-day motivation of employees (Whetten & Cameron, 2002).

What an organisation measures, monitors, and controls in its appraisal process conveys a powerful message to employees regarding the nature of the employment relationship (Rousseau, 1995). For these reasons, agreement between employers and employees is critical to its success (Rousseau, 2004).

From a recruitment perspective, the 2003 regional study anticipated growth in number of employees for over 50 percent of the 81 participating high technology firms (High tech study, 2003). Unlike the 2001 study, this one identified marketing and sales candidates as the most difficult to attract. In both studies, qualified technicians or technologists and computer programmers continued to be in demand (Calibre Strategic Services, 2001; High tech study, 2003). The shortage of trained and skilled technical human resources is a barrier to the growth and development of technology industries in the Okanagan Valley region (Calibre Strategic Services, 2001). These impediments are significant since they potentially limit opportunities for these firms to realise competitive advantages associated with their human capital.

Many empirical studies on HRM (Zahra and Pearce, 1990) provide an extensive review and several conceptual pieces (Govindarajan, 1986; Walker and Ruekert, 1987) have been published in the management literature. Slater and Narver, (1993) examined the business characteristics which lead to superior performance for the prospector, analyser, and defender strategy types and the aspects of motivation and performance of their employees. A relationship has

been explored between strategic type of the organization and employee characteristics. Based on the works cited below, it is clear that the Miles and Snow, (1978) typologies will lead to high performance only under certain circumstances.

Hayes and Wheelwright, (1984) and Bennett and Cooper, (1979) found that market-driven product development primarily leads to imitative products and line extensions. In contrast, Slater and Narver, (1993) find that strong market orientation is essential to the prospector's success. Innovation is externally, rather than internally motivated. This is consistent with recent evidence (Kohli and Jaworski, 1990; Narver and Slater, 1990), which confirm that market-driven businesses enjoy superior new product success. Von Hippel, (1986) suggests that innovators should work with lead users, who are mostly likely to see and appreciate product development.

Prospector organisations may be exciting, yet highly demanding. Employees in these organisations tend to be internally motivated, dedicated and work very long hours. The risk of burnout is often compensated through substantial financial reward. The emergence of the new economy has given rise to many prospector organisations, as firms have to constantly lookout for new opportunities to remain competitive.

Radcliff, (2002), in a brief article, advocates performance input from two perspectives – evaluation and feedback. Evaluation is the traditional judgment-oriented approach to performance appraisals, whereas feedback becomes a new paradigm that focuses on adjusting and reinforcing employee behaviour. This approach also promotes the importance of leadership and initiative on the part of employees. If the day-to-day dynamics of performance improvement is positive, employees can take a lead in the appraisal process (Egan, 1995) and greater employee involvement is associated with effective PM (McDonald & Smith, 1995). One reason is that employees who are committed to a particular program are most likely to make significant contributions to its success (Davis &

Landa, 1999). As well, the most effective practices not only involve management in the design and implementation of the program but also emphasise coaching and feedback (Baliga, 1995).

4.4 Studies related to Balanced Scorecard

The Balanced scorecard is a performance measurement system which integrates a Balanced between financial and non-financial information and has been chosen as the main management control tool to be studied here. Since the Balanced scorecard was introduced in the early 1990s, research suggests that 50 per cent of Fortune 1000 companies have experimented with the Balanced Scorecard (Silk, 1998). A longitudinal case study of a technology company was undertaken, with a critical analysis of the implementation of the Balanced Scorecard at one of the business units. Both qualitative and quantitative research tools were used. The thesis discusses the interaction between changes in management control systems and organisational changes though the use of the Laughlin, (1991) framework and the three mechanisms of institutional isomorphic suggested by DiMaggio and Powell, (1991).

According to Hickman, (2004), most American businesses, for the greater part of the 20th century, were answered on a single measure of performance – their finances. Over the last couple of decades, investors, board members, analysts, and stakeholders have focused almost exclusively on a company's financial figures as the key to its overall health. In 1990, David Norton, then CEO of Nolan Norton, and Robert Kaplan, a Harvard Business School professor, led a multi-company study to identify new ways to measure company performance. The result of their study has evolved into what has been called the single most influential business concept in the latter half of the 20th century – The Balanced Scorecard (BSC). The BSC was first introduced as an improved measurement framework by Robert Kaplan and David Norton in 1992.

Kaplan and Norton first introduced the BSC in 1990 through a one-year study of 12 companies. The results were reported in the HBR in 1992 (Kaplan and Norton, 1992). These researchers concluded that financial measures alone were not sufficient to measure performance. Other factors in the new economy such as competence and knowledge, customer focus, and operational efficiency and innovation were missing from traditional financial reporting. They reported the highly successful results of Rockwater and FMC Corporation's use of BSC (Kaplan and Norton, 1993). In 1996, Kaplan and Norton published *The Balanced Scorecard: Translating Strategy into Action* to explain how to develop and use the BSC (Kaplan and Norton 1996a) and two more papers in the HBR (Kaplan and Norton 1996b, 1996c).

Kaplan and Norton, (1993) gave idea that there should be a direct mapping between each of the several 'strategic objectives' attached to each perspective and one or more performance measures. The other improvement arose from the measure-based linkages which provided a richer model of causality. This became an increasingly important element of the Balanced Scorecard design methodology, giving rise to linkages between the strategic objectives themselves with causality linking across the perspectives toward key objectives relating to financial performance. This attempt to visually document the major causal relationships between strategic objectives is known as the 'strategy map' diagram. This four perspective strategic linkage model enabled the Balanced scorecard to evolve from an improved measurement system to a core management system, therefore becoming the central element of 'a strategic management system' (Kaplan and Norton, 1996).

Over the years, Kaplan and Norton and others have conducted research supporting their statement that financial measures are not enough. The BSC has been successfully used to increase performance in large organizations and reported in journal papers in the profit sector by the U.S.-based Pitney Bowes (Green et al., 2002), Coors Brewing Company (Walker, 1996), and White Lodging Services (Denton and White, 2000), as well as by European-based

ABB Industries A.G. (Ahn, 2001), and in the nonprofit sector by the city of St. Charles, IL (Maholland and Muetz, 2002) and a cardiology unit of a hospital (Oliveira, 2001). By implementing the BSC model, Duke University's preoperative services department has "evaluated, Balanced, and improved patient satisfaction by decreasing surgical delays, improving physician satisfaction, enhancing elective case minutes within the surgical block, and increasing volume while also decreasing overall cost per case" (McLean and Mahaffey, 2000). The National Women's Health Quality Initiative Advisory Council commented on the contribution of the BSC, stating that it is the most effective tool that can be applied across the health-care industry. They credit the power of the card with organizing multiple stakeholders around a shared mission, communicating and managing outcomes, and most importantly for its unique Balanced approach (Inamdar et al. 2000).

The first generation Balanced Scorecard lacked clear definition (Lawrie and Cobbold, 2004), although it was mentioned that vision and strategy should be at the centre of the measurement system. The adverse effects of poor measure selection had an impact on the usefulness and adoption rates of the Balanced scorecard (Lingle and Schieman, 1996; Schneiderman, 1999; Malina and Selto, 2001). The second generation Balanced scorecards introduced the notion of 'strategic objectives' for many organization and the causal flow presenting problems (Lawrie and Cobbold, 2004).

In a study on motives behind the implementation of the BSC, Malmi, (2001) studied how BSCs are applied in Finland and why companies adopt them. Based on a series of semi-structured interviews in 17 organisations, it was found that there are two uses of the BSC: through management by objectives and merely as an information system. The reason for the popularity of the BSC seemed to be, firstly, that logic of the BSC seemed appealing to many in Finland, and secondly, supply-side forces seemed to play an important role. Malmi, (2001) suggest that the increasing popularity of the BSC may be best explained by imitative behaviour (DiMaggio and Powell, 1991; Abrahamson,

1991; Abrahamson, 1996; Malmi, 1999). The Malmi, (2001) study provided a cross-sectional analysis of the motives behind the implementation of the BSC. This thesis aims to provide a more in-depth analysis through the use of a single case study. Lee and Ko, (2000) claim that the SWOT analysis to develop a set of strategies will serve as a stepping stone towards the actual implementation of the BSC. The SWOT matrix clearly identifies the critical success factors that can be implemented into the identification of the different aspects toward the Balanced scorecard.

A study by Henri, (2005) examined management control systems and a firm's capabilities from a resource based perspective using a cross-sectional analysis. However, this thesis provides more in-depth analysis through the use of a case study. The main contributions of this thesis are as follows: First, it provides a study of the relationship between the resource-based view of the firm and management control systems. Second, the resource-based strategic management control literature are analysed in order to understand the evolution of resources in the literature, as well as the evolution of resources at the business unit. Third, the longitudinal study of the business unit provides substantial material for a critical analysis on the implementation of the Balanced Scorecard at the business unit. Fourth, this thesis critically discusses the interactive relationship between organizational changes and changes in management control systems. Fifth, results from the questionnaire and case study provide evidence that the Balanced Scorecard does support the resource based view of strategy.

Although 50 per cent of Fortune 1000 companies currently use a Balanced scorecard (BSC), few small businesses are using a BSC. A review of the literature finds no BSC papers in leading small business/entrepreneurship journals. This research begins with a discussion of the BSC and why a university should use it. The Balanced scorecard (BSC) is one of the most highly touted management tools today and Fortune 500 companies are

increasingly using it. A survey found that approximately 50 percent of Fortune 1000 companies in North America and 40 percent in Europe use a version of the BSC (Kaplan and Norton, 2001a). The editors of the Harvard Business Review (HBR) identified the BSC as one of the most significant management ideas of the past 75 years (PR, 2003). The BSC is now being listed as a value methodology along with cost-benefit analysis and return on investment (Field, 2000); it is being used to help change organizational culture (Simpson and Cacioppe, 2001); and several companies have reported improved operational efficiency and profitability as a result of using the BSC (Atkinson and Epstein 2000; Gumbus, Bellhouse, and Lyons, 2003). Researchers have clearly stated that companies of all sizes are good at developing mission statements and strategies but poor at implementing operational strategies to achieve them, and that they are poor at measuring whether they are achieving their mission and strategy. The BSC addresses this problem by linking the mission to strategy and then translates the strategy into operational objectives and measures. The BSC can be used with five or 5,000 employees working toward the same goals (Gumbus and Johnson ,2003; Green et al. 2002). However, a review of the literature, from January 2000 to September 2003, of the Journal of Small Business Management, Journal of Business Venturing, Entrepreneurship Theory and Practice, International Small Business Journal, and the Journal of Small Business Strategy resulted in no papers with BSC in the title. A general BSC search throughout entire articles also did not find any of these journals, or any other small business / entrepreneurship journals, including the topic of the BSC. Thus, this empirical case study of three small to medium-sized enterprises (SMEs) using the BSC fills a gap in the literature while addressing management practices in small enterprises and entrepreneurship. Clearly, large businesses are benefiting from using a BSC, and small businesses can also benefit from using a BSC, as supported by three case studies.

Posa, (2008), in his work, "Achieving Functional Excellence through Balanced Scorecards" emphasized that how to use the Balanced Scorecard in Strategic

Marketing and Linking your Brand to the Bottom Line. He also showed the Combining EVA with Balanced Scorecard to Improve Strategic Focus and Alignment. Measuring, designing and improving IT governance through the Balanced Scorecard. Designing Balanced Scorecard for measuring research and development performance and managing and improving corporate governance and sustainability using the Balanced scorecard approach. He also emphasizes on creating the HR Scorecard Best Practice Strategies for Performance Measurement. He also presented a Case Study: US Office of Personnel Management Building and Developing the Finance Scorecard How to Create the Strategically-focused.

Blokdijk, (2008), in his work "Balanced Scorecard: 100 Success Secrets, 100 Most Asked Questions on Approach, Development, Management, Measures, Performance and Strategy Book Description" said that there has never been a Balanced Scorecard manual like this. 100 Success Secrets is not about the ins and outs of Balanced Scorecard. Instead, it answers the top 100 questions that we are asked and those we come across in forums, our consultancy and education programs. It tells you exactly how to deal with those questions, with tips that have never before been offered in print. This book is also not about Balanced Scorecard's best practice and standards details. Instead, it introduces everything you want to know to be successful with Balanced Scorecard. Johnson and Beiman, (2007) in their work "Balanced Scorecard for State-Owned Enterprises Driving Performance and Corporate Governance" reveal the impact of corporate governance and performance.

Akinsiwaju, (2008), in his work "Scorecard: Achieving Success and Balanced in a Turbulent World Book Description" presented that "Scorecard," which guides through simple and practical principles to enrich every aspect of your life. Akinsiwaju synthesizes wisdom about leadership, relationships, business management, spiritual growth, and personal health into the fictional story of Shola, a young Immigrant. Shola travels to London hoping to achieve greatness

but finds that life does not present its richest pearls to the timid, unwise, or undeserving. Despite his efforts, Shola's life withers. Then Shola meets George, an inspiring mentor, and Shola's sense of purpose awakens. Through many conversations, George kindles Shola's spirit with character qualities, ethics, and faith, equipping him to develop his potential and reach life's pinnacles.

Tyagi and Gupta, (2008) in "A Complete and Balanced Service Scorecard: Creating Value through Sustained Performance Improvement" provides key insights and methods for getting a grip on the performance of any service business. Understanding service process and performance measurement are essential in global economy today. This book provides key insights and methods for getting a grip on the performance of any service business. The authors solidify their argument that Service Scorecard can be an extraordinarily effective tool in empowering the service side to materially affect profit margins in any company. This is an excellent framework to sustain profitable growth in the service industry. The book also show how to set clear performance targets, benchmark performance, identify improvement opportunities, and capture performance data that offer leading indicators for financial performance. This book's proven performance framework is designed for sustaining profitable growth. Simply put, it offers today's most direct path to measuring performance and optimizing business value in any service business. It adapts current business scorecards to work for service businesses and design the scorecard to reflect everything that makes service businesses unique and inherently variable.

Agarwal and Agarwal, (2003) in his work "Value Balanced Score Card —A Tool of Performance Appraisal" discloses that Balanced score card is a new dimension in the field of performance appraisal. It is a comprehensive, top down view of the organizational performance with a strong focus on vision (i.e. goals) and strategy (i.e. performance measures). The Balanced Score Card has become the pre-eminent strategic tool for the management. The success of its

implementation is attributable to its focus on strategy and the future. By the help of this the managers are able to translate broad mission statements into tactical action plans. It paves the way for the managers to exploit the firm's information resources and ultimately produce economic results while directing the firm towards the achievement of its goals.

In the presence of rapid market change, proactive business units must have the option to modify their strategies to take advantage of opportunities or put off threats (Day, 1991). According to Jaworski and Kohli, (1992), market orientation and autonomy are positively related and both are important to the fast-moving prospector. Since autonomy promotes a high degree of market orientation, prospectors should benefit from being relatively autonomous. Gentry, (2003) in his project on "Balanced Scorecard: An Instrument of Change for Facilities Services" said Balanced Scorecard implementation is a successful and systemic approach to enrich the performance of an organization. It incorporates the strategy of gaining knowledge about the organization to enhance performance, and improve effectiveness and efficiency. It helps the organization manage its strategy over the long-term. It is an instrument of change. Balanced Scorecard can help an organization review and improve its financial, customer service, internal processes, and human capital aspects in order to better optimize end results (e.g., financial stewardship, customer satisfaction, effective and efficient processes and employee engagement). Balanced Scorecard is a tool that organizations can use to increase their capacity for change and become a learning organization.

Broadly speaking the four main BSC books (Brown, 1996, Olve et al, 1999, Kaplan & Norton, 1996, 2001) are not especially focusing on environmental and social issues but simply bringing to the reader examples of Corporate BSCs. Even though each of them mentions occasionally environmental issues they do not provide with examples of integration. On the other hand in the environmental management literature we found four authors to have taken

some features of the BSC to surface the value of environmental programs (Johnson 1996, Radcliffe 1999, Epstein & Wisner 2001, Nilsson 2001). The first two however, only discuss the issue in theory. (Epstein & Wisner, 2001 and Telia Nilsson, 2001)

Gumbus, (2005), gained sustainable ground since first introduced by Kaplan and Norton in 1992, and is today used by over 50 percent of the Fortune 500 companies. Furthermore there are those who go as far as categorizing the BSC as “the single most important management tool in Western organizations” (Schneiderman, 1999). Although the management system seems to be of great success and benefit there are several reports on high failure rates among firms implementing the BSC (Olve, 2003, Marr and Neely, 2003, DeBuske and Crabtree, 2006). To take one example, the survey study made by the consultancy firm KPMG, cited by DeBuske and Crabtree, (2006), states that 70 percent of the researched companies, who all tried to implement and work with the BSC, failed. Reasons for this high failure rate can be found in the extensive literature on BSC pitfalls, which covers everything from low top management support, poor design of the actual scorecard, to software complications and communication problems. This implies that a successful BSC implementation and work process has a high rate of complexity and thus needs a high level of support. As an attempt to facilitate process of implementing and working with the BSC, there has been a substantial development of decisional support system dedicated to support the implementation and work of the BSC. According to Olve, (2003) the number of software packages supporting the BSC in the market is growing and now exceeds 100. Even though the software solution does not come first in any BSC implementation (Marr and Neely, 2003), the necessity of automatization is, according to Classe, (1999) great if the BSC is to become an integral part of the business, something that is stressed as vital by Kaplan and Norton, (2001). However, even though the amount and quality of software solutions in the market are constantly increasing, a majority of the BSC companies use solutions characterized by a low level of sophistication

such as Microsoft Excel or PowerPoint (Olve et al, 2003, Marr and Neely, 2003). Consequently, companies experience problems with limitations accompanying these kinds of software, such as no scalability possibility, time consuming to update, insufficient communication support and difficult to analyze are common mentioned limitations (Marr & Neely, 2003). A natural question that arises is why companies choose to use unsophisticated software when the market is flooded by more BSC specific solutions. Olve et al (2003) explain this phenomenon by pointing out the high accessibility and usability-knowledge of MS Office products. However, what if a modern and sophisticated DSS solutions with the latest in dashboard technology could actually make a difference in the success rate of the BSC implementation and work. One way of finding out would be by studying the effects a BSC specific DSS have on the most common pitfalls. An interesting thought would be to consider if a higher usage of these modern and BSC specific DSSs generate the needed extra value for companies to successfully avoid the pitfalls and extract the full benefits of the BSC model.

Marr and Neely, (2003) note that BSC software can help an organization to be strategy focused in three stages. In the first stage BSC software can provide a visual representation of their strategy through strategy maps. In the second stage it can cascade high-level scorecards down to customized scorecards to all employees, and in the third stage BSC software can make the strategy into everyone's work and into a continual process by providing a new reporting and feedback framework through cascading style sheets. (Marr & Neely, 2003)

Marr and Neely, (2003) claim that there are three main reasons for managers to implement a BSC application:

- Data integration – a BSC software can allow organizations to integrate data from multiple data sources.

- Data analysis and storing: BSC software allows organizations to analyze the data across all data sets of the scorecard, both qualitative and quantitative.
- Communication and collaboration: BSC software can facilitate communication of performance data among users, top down and bottom up. It also can enable collaboration and feedback loops.

However many authors draw attention to the fact that software is only a tool and that it is not a substitute for the initial hard work of strategic analysis (Marr & Neely, 2003; Sharman and Kavan, 1999).

Lena Kay Lin, (2006) reveals in his work titled “Exploring Management Control Systems Using the Resource-Based View: A Case Study of the Balanced Scorecard” that the relationship between resource-based view of strategy and the Balanced scorecard, as well as the impact of these on manager's perceived performance. Contingency theory (Otley, 1980) has been used as the overall framework for this thesis.

Hanne Nerreklit, (2000) “The Balanced on the balanced scorecard a critical analysis of some of its assumptions” pointed out that academic scholars have given increasing attention to the importance of strategic measurement systems including both non-financial and financial measures. One of the approaches adopted is that of the balanced scorecard. It is distinct from other strategic measurement systems in that it is more than an ad hoc collection of financial and non-financial measures. It contains outcome measures and the performance drivers of outcomes, linked together in cause-and-effect relationships, and thus aim to be a feed-forward control system. Furthermore, the balanced scorecard is intended not only as a strategic measurement system but also as a strategic control system which can align departmental and personal goals to overall strategy. This paper first examines the extent to which there is a cause-and-effect relationship among the four areas of measurement

suggested (the financial, customer, internal business- process and learning and growth perspectives).

Self, (2003) studied the implementation of the BSC at a university library, noting that its implementation led to the focus on the important topics, and to set organisational priorities. The library was able to devise strategic objectives which were classified by perspectives, and were accepted by the organisation.

It is important to pick a solution that meets the requirements of the organisation in order to ensure the usage and subsequent success of a BSC implementation (Marr, Erlhofer et al., 2000). Based on arguments put forward by Silk, (1998), Sullivan, (2002), and Classe, (1999), the decision framework identified by Marr and Neely, (2003) include ten selection criteria which should be considered when choosing a BSC software. Although packaged solutions are generally more cost-effective and quicker to implement (Marr, Erlhofer et al., 2000), building their own solutions offer the possibility of creating a solution that meets the unique needs and objectives of organisations (Sharman and Kavan, 1999).

4.5 Research Gap

After thoroughly going through different research works, articles, papers and journals based on Balanced Scorecard and its implementation in different organization, the researcher found that a lot of work has been done on the Balanced Scorecard approach of human resource management in different kind of organizations in different part of the world including USA, UK, Germany, Japan, China, India, Indonesia etc. To the best of the knowledge of the researcher, no work has been under taken in the context of government and Private Universities of Jordan as far as implementation of Balanced Score Card approach is concerned. Thus, there lies a big research gap. So, the researcher has confined his work to study the Balanced Scorecard approach of Human resource management in selected government and private universities of

Jordan. In this regard two of the government and same number of private universities are selected to carry out the task.

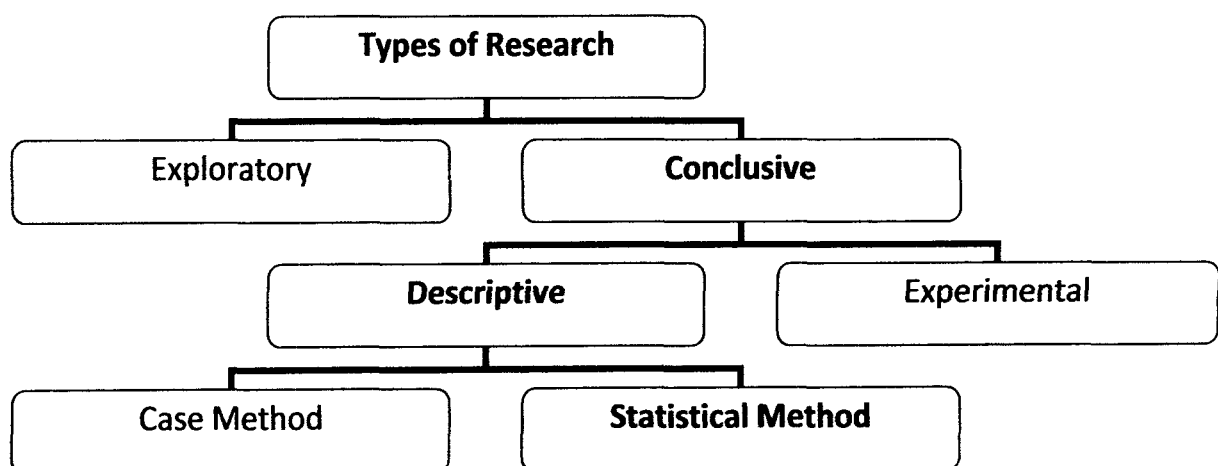
PART 2: RESEARCH METHODOLOGY

This part of the chapter deals with the methodology of research used to conduct the present study. It begins by stating the objectives of the study, formulation of hypotheses, research design and instrument design, sampling procedure, data collection, the profile of the respondents, method of analysis, and limitations of the study.

4.6 Introduction

Research methodology refers to the research process, the procedural framework within which the research is conducted. This methodology as defined by Leedey and cited by Remenyi et al.,(1998) is operational frameworks within which the facts are placed so that their meaning may be seem more clearly. Boyd et al (2005) classified research into two general types - exploratory and conclusive. Exploratory research looks for propositions. Conclusive research can be classified as either descriptive or experimental. Descriptive research portrays an accurate profile of persons, events or Situations. The classification is depicted in Figure 4.1.

Figure 4.1 Classification of Research



"Social research is theoretical, meaning that much of it is concerned with developing, exploring or testing the theories or ideas that social researchers have about how the world operates. But it is also empirical, meaning that it is based on observations and measurements of reality - on what we perceive of the world around us" (Trochim, 2006). Most research can be thought of as a blending of these two terms - a comparison of our theories about how the world operates with our observations of its operation. This research is a blend of theoretical and empirical.

4.7 Objectives of the Study:

- The basic objective of this study is to throw light on the evolution, concept, uses and implementation of the Balanced Scorecard Approach to Human Resource Management.
- To identify the targets and goals against which the universities measure their performance. This includes measures like employee's satisfaction, employee's retention, student's satisfaction, competitive market share, etc.
- To identify the way to make the internal business processes efficient to make universities better.
- To make a comparative analysis of the performances of the staff including teaching as well as non teaching employees of government and private universities of Jordan.
- To highlight different measures required in motivating teaching and non teaching staff members to deliver their best for the welfare of the university.
- To identify and analyze the driving factors behind the implementation of the BSC and what are major problems in its implementation?
- To analyse whether design of the Balanced Score Card (BSC) reflects the resources of a university which provides competitive advantage?

- To analyse whether universities use the resource-related BSC information in their decision-making activities or not?
- To analyse whether there is a positive relationship between universities' use of the resource-related BSC information and their perceived performance in Jordan?

4.8 Hypotheses of the Study: To undertake the study of the various aspects of Balanced Score Card of private and public universities of Jordanian universities, the following null hypotheses are framed.

Null hypothesis **H₀-1**: There is no significant difference between the public and private universities of Jordan in terms of Balanced Score Card (BSC).

Further this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-1 A**: There is no significant difference between the public and private universities of Jordan in terms of General perspective of Balanced Score Card.

Null hypothesis **H₀-1 B** There is no significant difference between the public and private universities of Jordan in terms of Financial Perspective.

Null hypothesis **H₀-1 C**: There is no significant difference between the public and private universities of Jordan in terms of Internal Process Perspective.

Null hypothesis **H₀-1 D**: There is no significant difference between the public and private universities of Jordan in terms of Human Resources Perspective.

Null hypothesis **H₀-2**: There is no significant difference in the perception of academicians and non-academicians towards Balanced Score Card.

Further, this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-2 A**: There is no significant difference in the perception of academicians and non-academicians towards General Perspectives.

Null hypothesis **H₀-2 B**: There is no significant difference in the perception of academicians and non-academicians towards Financial Perspectives.

Null hypothesis **H₀-2 C**: There is no significant difference in the perception of academicians and non-academicians towards Internal Process Perspectives.

Null hypothesis **H₀-2 D**: There is no significant difference in the perception of academicians and non-academicians towards Human Resource Perspectives.

Null hypothesis **H₀-3**: There is no significant difference in the perception towards Balanced Score Card on the basis of gender.

Further, the significant difference of this hypothesis is tested from the four different perspectives of Balanced Score Card like Financial, internal process, customers and Human resources.

Null hypothesis **H₀-3 A**: There is no significant difference in the perception towards Balanced Score Card on the basis of General Perspectives.

Null hypothesis **H₀-3 B**: There is no significant difference in the perception towards Balanced Score Card on the basis of Financial Perspectives.

Null hypothesis **H₀-3 C**: There is no significant difference in the perception towards Balanced Score Card on the basis of Internal Process Perspectives.

Null hypothesis **H₀-3 D**: There is no significant difference in the perception towards Balanced Score Card on the basis of Human Resources Perspectives.

Null hypothesis **H₀-4**: There is no significant difference on the basis of experience towards Balanced Score Card.

Further, this hypothesis is tested from the four different perspectives of Balanced Score Card like general, financial, internal process, and Human resources.

Null hypothesis **H₀-4 A**: There is no significant difference on the basis of experience towards General Perspectives.

Null hypothesis **H₀-4 B**: There is no significant difference on the basis of experience towards Financial Perspectives.

Null hypothesis **H₀-4 C**: There is no significant difference on the basis of experience towards Internal Process Perspectives.

Null hypothesis **H₀-4 D**: There is no significant difference on the basis of experience towards Human Resources Perspectives.

Null hypothesis **H₀- 5**: There is no significant association between the Average life cycle of facilities and equipments offered in the universities of Public and Private sector.

Null hypothesis **H₀-6**: There is no significant association between the Average life cycle of facilities and equipments offered in the universities and the sector to they belong.

Null hypothesis **H₀-7**: There is no significant association between average number of papers by academic staff published in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-8**: There is no significant association between the percentages of International students enrolled in comparison to total number of students in the universities and the sector to which they belong.

Null hypothesis **H₀- 9**: There is no significant association between Conferences/ Seminars/ Workshops organized in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-10**: There is no significant association between the average number of papers by academic staff published in ISI journals in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-11**: There is no significant association between average number of papers by academic staff published in refereed research journals in a year in the universities and the sector to which they belong.

Null hypothesis **H₀-12**: There is no significant association between the number of online programs offered in the universities and the sector to which they belong.

Null hypothesis **H₀-13**: There is no significant association in regard to communication of the implementation of the performance measurement system to the employees of the universities of Public and Private sector.

Null hypothesis **H₀-14**: There is no significant association in regard to deficiencies of performance measurement system in the universities of Public and Private sector.

Null hypothesis **H₀-15**: There is no significant association between academicians and non-academicians in regard to average number of papers by academic staff published in a year in the universities of Public and Private sector.

Null hypothesis **H₀-16**: There is no significant association between academicians and non-academicians in regard to average number of papers by academic staff published in refereed research journals per year in the universities of Public and Private sector.

Null hypothesis **H₀-17**: There is no significant association between academicians and non-academicians in regard to number of online programs offered in the universities of Public and Private sector.

4.9 Research Design

Keeping in view the objectives of the research study, the researcher used a descriptive research design.

4.9.1 Sources of Data

The data which constitute the raw material for carrying out the present work have been obtained from a number of sources. The primary and secondary data were collected using the respective sources. Data that is already available by someone else is referred to as secondary data. The secondary sources are books, reports, journals, magazines, theses, internet sites, university brochures, and news papers etc. One of the main sources of secondary data is the library. The libraries consulted are: Seminar, Department of Business Administration, AMU; Ratan Tata Library, Delhi School of Economics; MDI Library, Gurgaon; libraries of various universities of Jordan.

To carry out the undertaken research work, the researcher has heavily relied on primary data by preparing the questionnaire to collect the information from the teaching and non-teaching staff of the government and private universities of

Jordan. Different set of questions were prepared to get the required information from all the segment of the universities like satisfaction level, internal processes, incentives, motivation and facilities in different universities. For collecting primary data, the researcher carried out a pilot survey before conducting the main survey. The pilot study helped to ensure the control of non-sampling error. Primary data was collected, from a sample of 30 academic staff and 30 non-academic staff for pilot study and 288 respondents for main study, from two public and two private universities of Jordan.

4.9.2 Target population

Target population for the purpose of this study is defined as all the academic and non-academic staff two public and two private universities of Jordan.

4.9.3 Sampling units

A two stage sampling was adopted. The first stage sampling units were the four universities of Jordan. The second stage sampling units were individual employees in the academic and non-academic section of the universities.

4.9.4 Selection of the sample

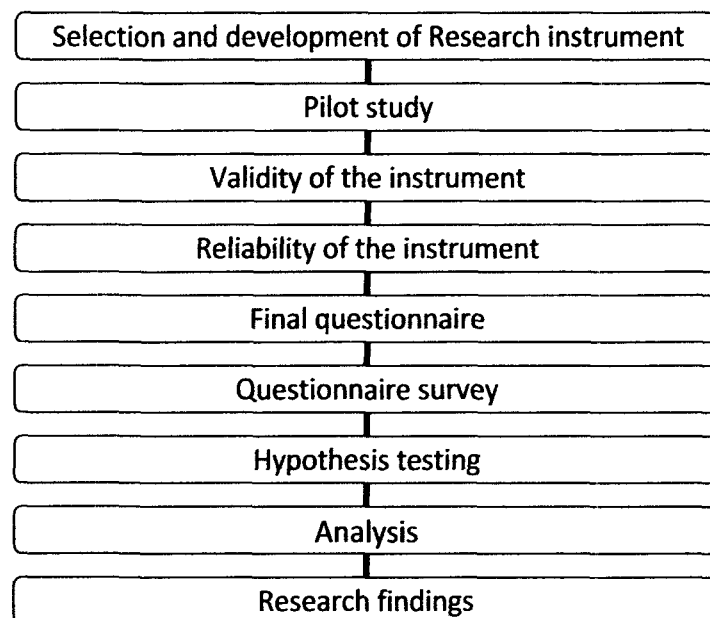
Four universities, two governments and two private, universities of Jordan had been sampled. "For most purposes $n=30$ is sufficient, provided the universe is not exceedingly asymmetrical" (Boyd et. al., 2005). 100 is a medium sized sample and 400 is a larger sample (Boyd et. al., 2005). More than 5% sample size is an appreciable proportion of the sample universe (Boyd et. al., 2005). Estimated population (academic and non-academic staff) of the four universities is not more than 5000. Thus, a minimum sample size of 100 was decided for each plant. This makes $4 \times 100 = 400$ as the total minimum sample size, which is a large sample. This research used convenience sampling and sampled a group of people readily available to the researcher at the time of sampling. This was done as the entire list of the population was not available to the researcher. Hence, random sampling technique could not be employed by the researcher. A

quota system was used to select at least 100 employees from each university and to select approximately equal number of employees from the academic and non-academic groups respectively

4.9.5 Research instrument

The process of selection of the research instrument, its reliability & validity and the data analysis process leading to the research findings is presented in figure 4.2 and discussed subsequently.

Figure 4.2 Research instrument selection and data analysis process



Since no standard questionnaire was available, a questionnaire has been designed to carry out this study. After a detailed literature review constructs were identified to study the problem and to develop the questionnaire. Further discussions were carried out with subject experts to crystallize the constructs. These constructs were used to prepare the questionnaire. The questionnaire is divided into two parts. Part A has close ended questions related to general, financial, internal process, and HR perspectives on a Likert scale. The type of questions that was used in this investigation was close ended questions. These types of questions offer advantage. These types of questions force the

respondents to choose the response from a number of possible replies. By restricting the answer set, it is easy to calculate statistical data over the whole group or subgroup of participants.

Part B has questions related to academic aspects and demographic variables. The first draft of the questionnaire had 45 close ended questions in part A and 11 questions in part B. At the time of the pilot study, there were 45 items. The items were related to different perspectives- General Perspective, Financial Perspective, Internal Process Perspective and Human Resource Perspective. With the help of factor analysis, the internal validity of the instrument was checked. Items having low factor loadings were removed from the final draft of the instrument. As a result, 45 items were reduced to 30 items. The instrument is Likert response scale to measure responses on an interval of 1 to 5 rating from strongly disagree to strongly agree.

The first draft of the questionnaire was set in English and it was used for pilot testing. During the pilot testing the need was felt to have questionnaire in Arabic also, as many non-academicians and some academicians were not very much comfortable in giving responses in English. After this, the questionnaire was translated into Arabic and for final data collection both the sets were provided to the respondents.

4.9.6 Reliability and Validity of the Instrument

The instrument used in this research has been developed since no standard questionnaire was available on the particular area of research. Thus before conducting final study, the validity, reliability and generalisation of the instrument has been tested and approved. Thus, the instrument was validated to apply to the Jordanian universities. Measures of variables should have validity and reliability (Cronbach, 1971: Nunally, 1978) in order to draw valid references from the research.

Instrument Validity

Exploratory Factor Analysis (EFA) was performed on the scale to check whether all items load on a single construct. To determine if data are likely to factor well, before proceeding with EFA, Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy and Bartlett's Tests of Sphericity were performed. If KMO is found to be greater than 0.50 then one can proceed with the factor analysis. (Malhotra, 2005). The KMO values was .836, signaling that data was suitable for factor analysis.

Bartlett's Test of Sphericity measures the presence of correlations among the variables. It provides the statistic probability that the correlation matrix has significant correlation among at least some of variables. Thus, a significant Bartlett's Test of Sphericity is required (Malhotra, 2005). Because $p=0.000$ (its associative probability is less than 0.05) for the scale, we could proceed with factor analysis. The statistics are shown in table 4.1.

The variance explained by the initial solution, and extracted components for each of the factors are taken out. These are shown in tables 4.2, 4.3 respectively. Some items (seventeen items) showing the loading lower than 0.4 are removed from further calculations- F2, F4, IP3, IP6, IP8, IP11, H1, H5, H6, H8, H10, H13, H14, H17, H20, H23, and H24. After removing these items, the remaining items were recorded in ascending order for each construct.

Table 4.1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling		.836
Bartlett's Test of Sphericity	Approx. Chi-Square	4535.744
	df	946
	Sig.	.000

Table 4.2: Total Variance Explained

	Initial Eigen values			E	Extraction Sums of Squared Loadings		
	Total	% of Variance	% of Cumulative		Total	% of Variance	% of Cumulative
1	8.256	18.763	18.763		8.256	18.763	18.763
2	3.348	7.609	26.372		3.348	7.609	26.372
3	1.864	4.235	30.607		1.864	4.235	30.607
4	1.698	3.858	34.465		1.698	3.858	34.465
5	1.626	3.696	38.162		1.626	3.696	38.162
6	1.498	3.405	41.567		1.498	3.405	41.567
7	1.435	3.262	44.829		1.435	3.262	44.829
8	1.285	2.920	47.749		1.285	2.920	47.749
9	1.261	2.866	50.614		1.261	2.866	50.614
10	1.239	2.817	53.431		1.239	2.817	53.431
11	1.190	2.704	56.135		1.190	2.704	56.135
12	1.125	2.556	58.692		1.125	2.556	58.692
13	1.012	2.300	60.992		1.012	2.300	60.992
14	1.006	2.286	63.278		1.006	2.286	63.278
15	.985	2.238	65.516				
16	.960	2.183	67.699				
17	.914	2.077	69.776				
18	.892	2.028	71.804				
19	.861	1.957	73.760				
20	.832	1.891	75.651				
21	.756	1.718	77.369				
22	.736	1.673	79.043				
23	.722	1.640	80.683				
24	.700	1.592	82.275				
25	.689	1.566	83.841				
26	.654	1.487	85.328				
27	.617	1.403	86.731				
28	.594	1.351	88.081				
29	.535	1.216	89.297				
30	.531	1.207	90.504				
31	.513	1.167	91.671				
32	.504	1.146	92.817				
33	.437	.992	93.809				
34	.426	.969	94.778				
35	.389	.883	95.661				
36	.365	.830	96.491				
37	.310	.704	97.195				
38	.289	.656	97.851				
39	.227	.516	98.367				
40	.177	.403	98.770				
41	.155	.352	99.122				
42	.146	.331	99.453				
43	.124	.282	99.735				
44	.116	.265	100.000				

Extraction Method: Principal Component Analysis

Table 4.3: Extraction Method: Principal Component Analysis

	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
G1	.009	.082	.226	.220	.054	-.419	-.333	-.109	.089	.052	.195	-.004	.106	.100
G2	.046	-.245	-.242	.407	-.006	-.018	.047	.246	-.242	.213	.046	.407	-.142	-.006
G3	-.029	.099	-.100	.264	.069	-.005	.298	.438	-.199	.062	-.282	-.058	-.033	-.101
F1	-.083	-.114	.090	.455	.268	-.121	.437	.049	.260	.267	-.080	.034	-.115	.094
F2	.134	.016	.092	.085	.279	-.244	-.068	-.266	.076	.059	.229	.312	-.256	.219
F3	.079	.133	-.149	.217	-.338	.423	-.015	-.274	.187	.082	-.083	.153	.010	-.232
F4	-.043	-.201	-.080	.131	.364	.116	-.184	.195	.463	-.305	-.023	-.074	.229	.072
IP1	.733	.075	-.132	-.169	-.106	-.050	-.021	-.116	-.079	-.092	.017	-.020	.074	.086
IP2	.736	.088	-.045	.017	-.061	-.006	.011	.017	.114	.170	-.125	-.017	.101	.156
IP3	.020	-.441	.095	.056	.109	.178	.207	.037	.197	-.141	.142	.024	.219	-.452
IP4	.844	.090	-.101	-.181	.044	.044	-.009	.031	.072	.005	.051	-.098	-.015	-.031
IP5	.654	-.115	-.195	-.151	.036	-.002	.024	-.056	.161	.103	.204	-.110	-.135	-.047
IP6	-.041	-.556	-.157	.165	-.014	.066	.097	-.138	-.082	-.104	.062	.112	-.177	-.131
IP7	.071	-.236	-.015	.110	-.107	.202	-.115	.327	.371	.036	.494	-.021	.033	.228
IP8	.042	-.157	-.308	-.405	-.308	-.096	.058	.114	-.001	.425	-.026	-.172	.050	-.016
IP9	-.016	-.412	.011	-.043	.051	-.118	.238	-.250	-.172	.231	.207	-.029	.421	.117
IP10	.009	-.430	.080	-.033	.078	.347	-.344	.102	-.322	-.102	.033	-.005	.153	.141
IP11	.523	-.053	.242	.036	.336	.220	.144	.022	-.090	-.138	-.084	-.122	.121	.108
IP12	-.031	-.592	.223	.058	-.008	.049	-.044	-.121	.001	.115	-.015	-.270	-.037	-.170
IP13	.889	-.062	.015	.051	.027	-.035	-.015	.012	.035	-.042	-.038	-.032	-.043	-.028
H1	-.018	-.187	-.342	.027	.078	.295	-.237	.176	.015	.104	-.087	.277	.026	.286
H2	.746	-.108	.043	.182	-.007	-.172	.103	-.011	.054	-.085	-.013	.067	-.012	-.124
H3	.561	-.075	.197	.278	-.039	-.131	.100	.056	-.001	-.115	.092	.165	.107	-.146
H4	.182	.286	.506	-.054	-.105	.242	.151	.039	-.169	.059	.148	.053	.051	.154
H5	-.080	.090	.015	.039	.385	.257	-.245	.180	-.154	.450	.108	-.034	.178	-.225
H6	-.097	-.165	.147	-.334	.074	-.202	.238	.120	.145	-.227	-.182	.204	.161	.187
H7	.301	.140	.508	.135	-.401	.244	.085	.095	-.009	.103	.060	.076	-.132	.066
H8	-.074	.323	-.143	-.267	.335	.146	.212	-.092	.330	.368	-.014	.149	.061	-.021
H9	-.010	.308	-.374	.096	-.146	.171	.306	-.123	-.148	-.099	.509	.007	.151	.072
H10	-.884	.093	.025	-.011	-.011	.080	.083	-.020	.072	-.027	.059	.023	.032	.023
H11	.000	.342	.314	-.298	.098	.284	.282	.139	.142	-.045	.130	-.089	-.241	-.085
H12	.073	.199	-.020	.230	.319	.132	.272	-.287	-.278	.011	-.145	-.162	.241	.201
H13	.002	-.431	.189	.098	-.328	-.173	.170	.162	.081	.227	.049	-.248	.054	.259
H14	-.003	.043	.191	-.324	-.082	-.257	.034	.333	-.158	-.045	.127	.422	.293	-.225
H15	-.020	.224	.161	.113	.276	-.275	-.225	.051	-.129	.165	.292	-.267	-.076	-.244
H16	.117	.224	.322	.257	-.215	.199	-.310	-.256	.137	.113	-.174	.092	.164	-.022
H17	-.035	.325	-.263	.321	-.157	-.043	.000	.331	-.040	-.206	.027	-.348	.019	.059
H18	.021	.594	-.281	.169	-.067	-.049	.089	-.069	-.005	-.196	.220	.025	.124	-.050
H19	.000	.513	.016	.185	-.212	-.199	-.090	.092	.238	.160	-.198	.020	.351	-.062
H20	.196	.550	.115	-.057	.260	.028	-.122	.188	-.112	.047	.027	.043	-.135	.080
H21	.869	-.040	-.067	-.043	.036	.034	-.028	.037	.009	.013	-.068	-.068	-.008	.005
H22	.875	.018	-.232	-.024	.077	-.072	-.073	-.047	.012	.028	-.078	.022	-.008	-.071
H23	-.873	.032	-.098	.023	.002	-.033	-.021	-.026	.045	.051	-.039	-.026	.013	-.020
H25	.887	-.043	-.031	-.012	-.019	.044	.006	.055	-.071	.048	-.016	.083	.034	-.013

Extraction Method: Principal Component Analysis

a 14 components extracted

Instrument Reliability

Descriptive statistics and reliability coefficients of the valid items (twenty eight items) of the four constructs are displayed in table 4.5. All of the Cronbach Alpha's exceeded limit of 0.7 and therefore suggest that the four construct in the scale demonstrate acceptable reliability for survey of Jordanian universities.

Table 4.4 Descriptive Statistics and Cronbach's Alpha's Item Statistics

	Mean	Std. Deviation	Cronbach's Alpha
G1	3.75	.987	0.893
G2	3.01	.850	
G3	4.58	.647	
F1	4.50	.734	0.805
F3	1.59	.635	
F4	4.71	.470	
IP1	1.94	.989	.714
IP2	1.70	.783	
IP3	4.48	.636	
IP4	2.52	1.247	
IP5	2.74	1.358	
IP7	4.57	.593	
IP9	4.55	.594	
IP10	4.38	.767	
IP12	4.17	.878	
IP13	2.76	1.380	
H2	2.27	1.066	.721
H3	2.78	1.362	
H4	2.83	1.189	
H7	2.26	1.078	
H9	1.71	.750	
H11	1.64	.781	
H12	4.17	.803	
H15	4.29	.750	
H16	1.59	.689	
H18	1.80	.865	
H19	1.67	.844	
H21	2.97	1.547	
H22	2.98	1.576	
H25	2.89	1.581	

4.10 Summary of Demographic Data

The study has been preformed through a numerous of interviews aiming to get an in-depth understanding of the research problem making the study a qualitative study. Globalization pressures escalate competitiveness and, in response, global companies tend to adopt a handful of Western management practices. One of these is the Balanced Scorecard. The data collection techniques consisted of in-depth interviews, which included open-ended and probe questions with management personnel. The required information has been collected from primary as well as secondary data.

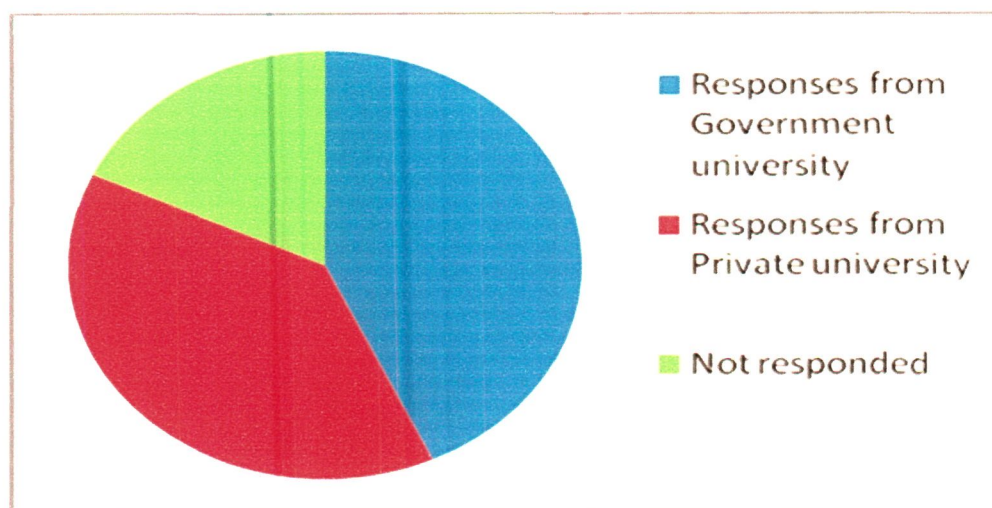
4.10.1 Primary Data

To carry out the undertaken research work, the researcher has heavily relied on primary data by preparing the questionnaire to collect the information from the students, teaching and non-teaching staff of the government and private universities of Jordan. Different set of questions were prepared to get the required information from all the segment of the universities like satisfaction level, internal processes, incentives, motivation and facilities in different universities.

To carry out the research work, Around 400 questionnaires were sent to different respondents through mail as well as directly to the concerned person in the university. 306 questionnaires were received by the respondents after two reminders from the teaching and non-teaching staff of the government and private universities of Jordan and rest of them either did not show any interest or denied to provide the information. Out of these 19 questionnaires were not fit for statistical analysis. Thus, 288 questionnaires were considered finally for statistical analysis. The responses of questionnaires are given in the form of the table 4.5:

Table 4.5: Pattern of Response

Responses through questionnaires	Number
Responses from Government/ public university	143
Responses from Private university	145
Not responded	112
Total	400

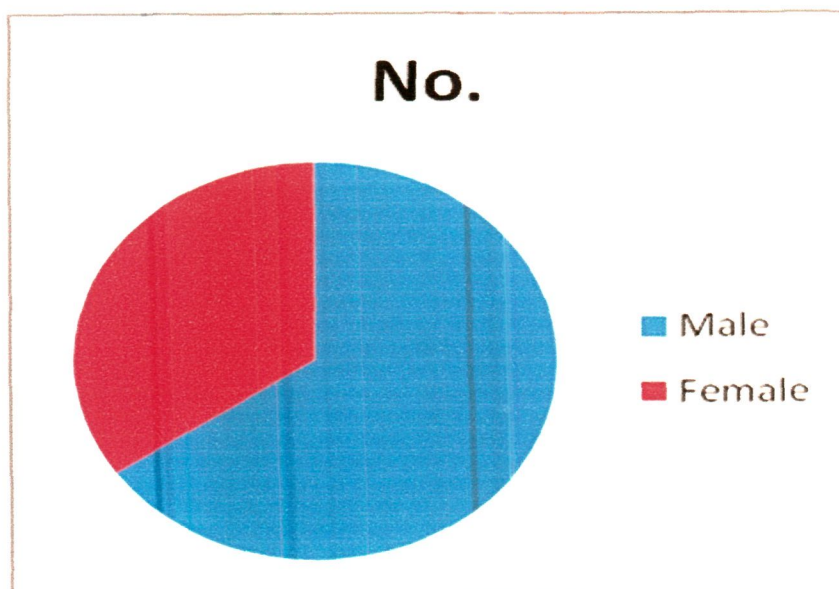
Figure 4.3 Pattern of Response

The questionnaires of 288 respondents of teaching and non-teaching staff members of public and private universities of Jordan were duly responded. The total number of female respondents was 99 and 189 respondents were male.

Table 4.6: Responses as per Gender

Gender	No.
Male	189
Female	99
Total	288

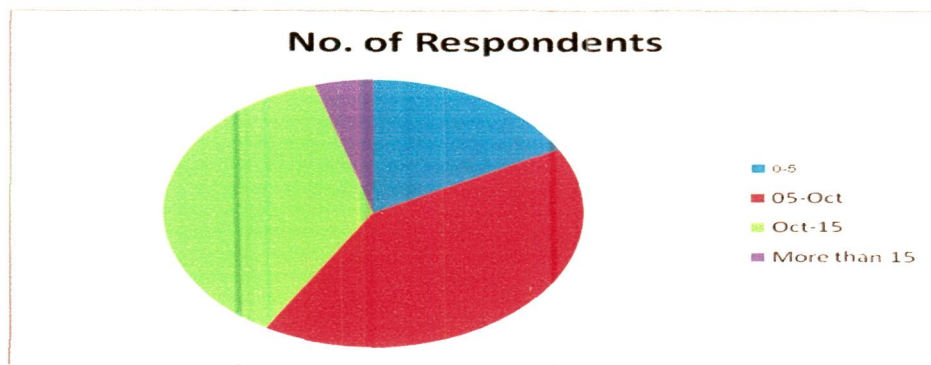
Figure-4.4 Responses as per Gender



The questionnaires were sent to people working in the government and private universities of Jordan with different designations like lectures, readers, professors, clerks, assistant registrars, deputy registrars, assistant proctors, accountants etc. from the university. These people were having experience from 1 to 30 years in their respective positions. The information related to the experience of the people who responded is given as follows:

Table 4.7: Responses as per Experience

Experience (In terms of years)	No. of Respondents
0-5	49
5-10	119
10-15	107
More than 15	13
Total	288

Figure 4.5 Responses as per Experience

The Research work was started by setting up of the objectives of the study. The hypotheses were framed to be tested. On the basis of the hypotheses, the data was collected and presented in the desired manner. The suitable statistical tools were to test the data like use of t- test, ANOVA, and chi-square test were used as these tools were the most suitable in the given conditions. The interpretation was made to test the data.

4.11 Limitations of the study

The major limitations, faced by the researcher during pursuing the research are described below.

- The present study is based on only two governments and two private sector universities of Jordan which may not be enough to make any final conclusion regarding the use of BSC in Jordanian Universities.
- A good research on primary data is one if samples are collected on random basis. The present work is based on selecting the four universities on the convenience of the researcher, keeping in mind the ease of access and cost factor is another important limitation of the study.
- The Balance scorecard has four perspectives like Financial, Internal process, customers and Human resources, but in this study the customers perspectives (Students) is missing element in reaching to the final conclusion. Detailed data from the students is not collected and analysed.

Only a few items regarding their perspectives are covered in the instruments.

- A thorough review of literature has been made by the researcher in regard to the Balance scorecard approach of Human resource management from many sources as possible for enrichment of the review, yet some important matter might have been over looked due to the lack of access. Such important research works would have enabled the researcher to identify of the research gap and setting of the objectives of this study in different ways.
- The research is confined to the education sector and that too of comparing only two governments and two from the private sector universities of Jordan. The application of Balance Scorecard Approach in industries should also been highlighted by comparing it with the universities to get better understanding of the effectiveness of the Balance Scorecard model.
- Some of the respondents had genuine concern regarding the applicability of certain items of the questionnaire, so they were very honest in replying the answers. On the other hand, Researcher observed that many respondents were not replying honestly to the questions asked in questionnaire.
- Due to certain personal constraints, researcher could not conduct the interview and include the qualitative data of Jordanian universities due to lack of finance and time which he considered for the study. Qualitative data had to be used for preparing balanced scorecard. It could have provided useful information and helped in comparison among various perspectives of balanced scorecard in government and private universities of Jordan.

4.12 Importance of the study

The present study "The Balance scorecard Approach of Human Resource Management in Selected Jordanian Universities" is an important research work which may be useful in the following ways:

- This study will definitely help to analyse and identify what are the driving factors behind the implementation of the BSC and what are major problems in its implementation. After going through this study, the users may get a clear cut idea as to how the Balance scorecard Approach should be used in the best possible manner.
- This study will help in making a comparative analysis of the performances of all categories of employees of government and private universities in relation to their efficiency and productivity.
- After going through this research work, anyone can know how effective this technique is in improving the overall efficiency of any organisation. If this technique is introduced, there will be totally different kind of motivation and perception among people working in the organisation.
- The Balance scorecard Approach will help in identifying the targeted and goals against which the universities will measure its performance. Balance scorecard Approach technique will definitely help in measuring the employee's satisfaction, employee's retention, student's satisfaction, competitive market share, etc which every organisation would like to know in their normal course of business.
- This study will help in analysing and identify what are the driving factors behind the implementation of the BSC and what are major problems in its implementation? Thus, the design of the Balance Score Card (BSC) will reflect the resources of a university which may provides competitive advantage in the market.
- The present work is a different kind of work which is related with the Balance scorecard Approach of Human Resource Management in Selected Jordanian Universities. This work will be a base for other researchers, who want to work further in this area to improve the efficiency of the universities or any other organisation by using Balance scorecard Approach of Human Resource Management.

CHAPTER-5

Analysis and Interpretation

5.1 Introduction

5.2 Testing of Hypotheses

5.3 Conclusion

CHAPTER-5

ANALYSIS AND INTERPRETATION

5.1 Introduction

The proposed research work "Balanced Scorecard Approach to Human Resource Management: A Study of Select Universities" has been done to assess overall impact of Balance Score Card Approach of Human Resource Management in universities of Jordan. To carry out the research work 288 samples were collected through questionnaire from academicians and non-academicians of public and private universities of Jordan.

5.2 Testing of Hypotheses: The following hypotheses are formulated to test and to substantiate the objectives of the study:

Null hypothesis H_{O-1} : There is no significant difference between the public and private universities of Jordan in terms of Balance Score Card (BSC). (Stands rejected)

Further this hypothesis is tested from the four different perspectives of Balance Score Card like Financial, internal process, customers and Human resources.

Null hypothesis $H_{O-1 A}$: There is no significant difference between the public and private universities of Jordan in terms of General perspectives of Balance Score Card (BSC). (Stands accepted)

Null hypothesis $H_{O-1 B}$: There is no significant difference between the public and private universities of Jordan in terms of Financial Perspectives. (Stands accepted)

Null hypothesis $H_{O-1 C}$: There is no significant difference between the public and private universities of Jordan in terms of Internal Process Perspectives. (Stands rejected)

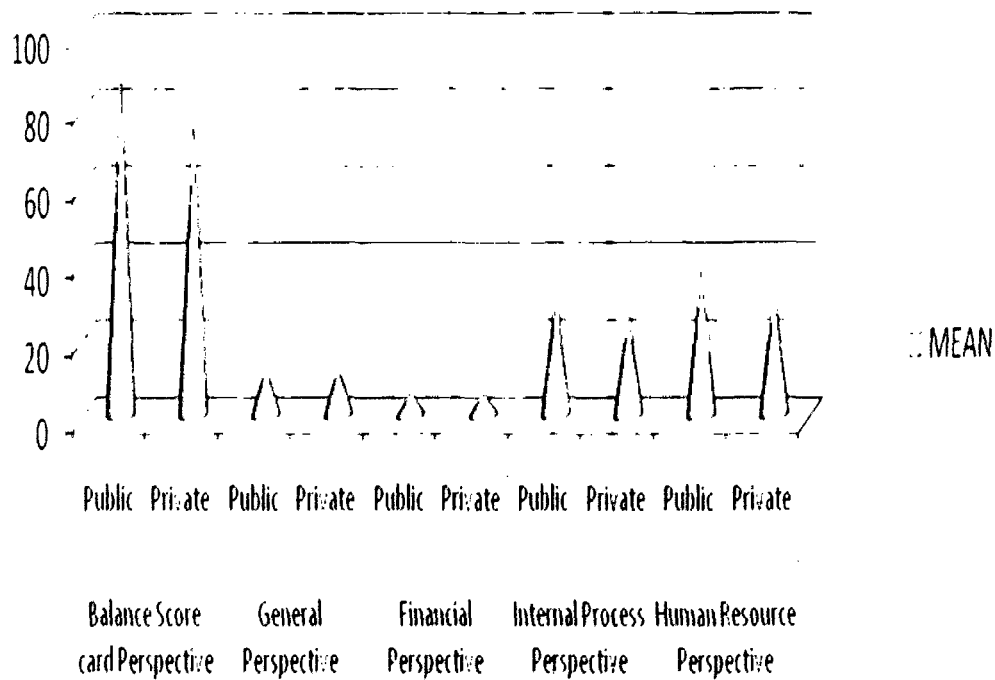
Null hypothesis $H_{O-1 D}$: There is no significant difference between the public and private universities of Jordan in terms of Human Resources Perspectives. (Stands rejected)

Testing of the Hypothesis using t-test

df =286

Table-5.1 Analysis of various aspects of balance score card with respect to public and private sector universities							
Sector (Public/Private)		N	MEAN	Standard Deviation	Standard Error Mean	t-Value	p-Value
General Perspective	Public	143	13.91	1.119	.094	.103	.918
	Private	145	13.90	.941	.078		
Financial Perspective	Public	143	6.14	.853	.071	.750	.454
	Private	145	6.06	1.053	.087		
Internal Process Perspective	Public	143	27.23	2.815	.235	28.354	.000
	Private	145	36.90	2.967	.246		
Human Resource Perspective	Public	143	32.08	4.478	.374	27.469	.000
	Private	145	45.90	4.048	.336		
Balance Score card Perspective	Public	143	79.36	5.755	.481	34.335	.000
	Private	145	102.74	5.801	.482		

Figure -5.1 Analysis of various aspects of balance score card with respect to public and private sector universities



The analysis regarding General Perspective between public and private sector reveals that there is no significant difference. Since the significant value of $t=1.03$ and $p=.918$, which is more than 0.05 at 5% level of significance.

It means in terms of general perspective between public and private sector of Jordanian universities, there is no significant difference. Even the mean (6.14 and 6.06) and standard deviation (1.119 and 0.941) are also quite similar. So, null hypothesis is accepted.

The analysis regarding Financial Perspective between public and private sector reveals that there is no significant difference. Since the significant value of $t=.750$ and $p=.454$, which is more than 0.05 at 5% level of significance.

It means, in terms of financial perspective between public and private sector of Jordanian universities, there is no significant difference. Even the mean (13.91 and 13.90) and standard deviation (.071 and .087) are also quite similar. So, null hypothesis is accepted.

The analysis regarding internal process Perspective between public and private sector reveals that there is significant difference. Since the significant value of $t = 28.354$ and $p = 0.000$, which is less than 0.05 at 5% level of significance.

It means in terms of internal process perspective between public and private sector of Jordanian universities, there is significant difference. Even the mean (27.23 and 36.90) and standard deviation (.071 and .087) are also showing substantial difference. So, null hypothesis is rejected.

The analysis regarding human resource Perspective between public and private sector reveal that there is significant difference. Since the significant value of $t = 27.469$ and $p = 0.000$ which is less than 0.05 at 5% level of significance.

It means in terms of human resource perspective between public and private sector of Jordanian universities, there is significant difference. Even the mean (32.08 and 45.90) and standard deviation 4.478 and 4.048) is also showing substantial difference. So, null hypothesis is rejected.

The analysis regarding balance score card Perspective between public and private sector reveal that there is significant difference. Since the significant value of $t = -34.335$ and $p = 0.000$ which is less than 0.05 at 5% level of significant.

It means in terms of balance score card perspective between public and private sector of Jordanian universities, there is significant difference. Even

the mean (79.36 and 102.74) and standard deviation 5.755 and 5.801) is also showing substantial difference. So, null hypothesis is rejected.

Null hypothesis H_0-2 : There is no significant difference in the perception of academicians and non-academicians towards Balanced Score Card. (*Stand accepted*)

Further, this hypothesis is tested from the four different perspectives of Balance Score Card like Financial, internal process, customers and Human resources.

Null hypothesis $H_0-2 A$: There is no significant difference in the perception of academicians and non-academicians towards General Perspectives. (*Stand rejected*)

Null hypothesis $H_0-2 B$: There is no significant difference in the perception of academicians and non-academicians towards Financial Perspectives. (*Stand rejected*)

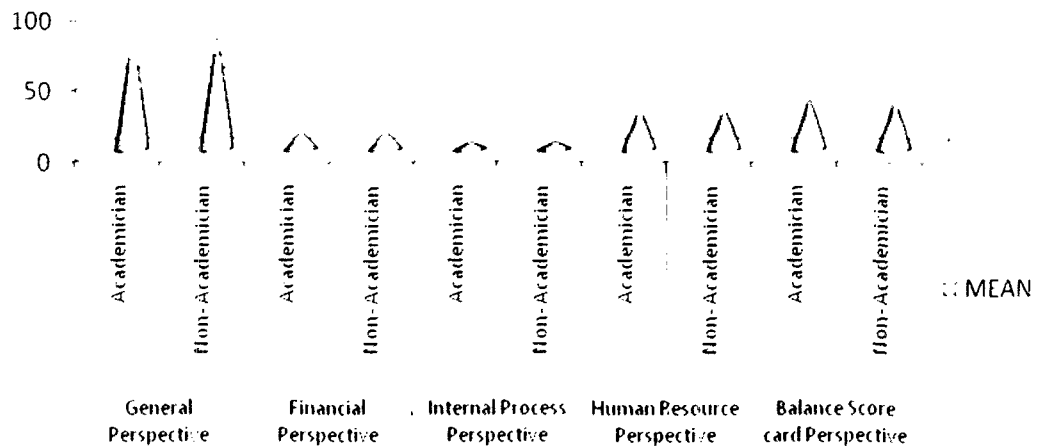
Null hypothesis $H_0-2 C$: There is no significant difference in the perception of academicians and non-academicians tow (*Stand rejected*)

Null hypothesis $H_0-2 D$: There is no significant difference in the perception of academicians and non-academicians towards Human Resource Perspectives. (*Stand accepted*)

df =286

Table-5.2 Analysis of various aspects of balance score card in regard to academicians and non-academicians of public and private sector universities							
Academician/ Non- Academician		N	MEAN	Standard Deviation	Standard Error	t-Value	p-Value
General Perspective	Academician	156	92.26	13.9778	1.119	1.588	0.113
	Non-Academician	132	89.82	11.7857	1.0258		
Financial Perspective	Academician	156	13.84	0.980433	0.0785	1.1281	0.2602
	Non-Academician	132	13.98	1.087514	0.0946		
Internal Process Perspective	Academician	156	6.096	1.070296	0.0857	0.0205	0.9834
	Non-Academician	132	6.098	0.808918	0.0704		
Human Resource Perspective	Academician	156	32.24	6.098241	0.4882	0.457	0.6477
	Non-Academician	132	31.93	5.05571	0.4400		
Balance Score card Perspective	Academician	156	40.08	8.427266	0.6747	2.3928	0.0174
	Non-Academician	132	37.80	7.598151	0.6613		

Figure -5.2 Analysis of various aspects of balance score card in regard to academician and non-academician of public and private sector universities



The analysis regarding General Perspective between Academician and Non-Academician reveals that there is no significant difference. Since the significant value of $t=1.588$ and $p=0.113$ respectively is more than 0.05 at 5% level of significant.

It means in terms of general perspective between Academician and Non-Academician of Jordanian universities, there is no significant difference. Even the mean (92.26 and 89.82) and standard deviation (13.9778 and 11.7857) is also quite similar. So, null hypothesis is rejected.

The analysis regarding financial Perspective between Academician and Non-Academician reveals that there is no significant difference. Since the significant value of $t=1.1281$ and $p=0.2602$ respectively is more than 0.05 at 5% level of significant.

It means in terms of financial perspective between Academician and Non-Academician of Jordanian universities, there is no significant difference. Even

the mean (13.84 and 13.98) and standard deviation (0.980433 and 1.087514) is also quite similar. So, null hypothesis is rejected.

The analysis regarding internal process Perspective between Academician and Non- Academician reveals that there is no significant difference. Since the significant value of $t=0.0205$ and $p=0.9834$ respectively is more than 0.05 at 5% level of significant.

It means in terms of internal process perspective between Academician and Non- Academician of Jordanian universities, there is no significant difference. Even the mean (6.096 and 6.098) and standard deviation (1.070296 and 0.808918) is also quite similar. So, null hypothesis is rejected and alternate hypothesis is accepted.

The analysis regarding human resource Perspective between Academician and Non- Academician reveals that there is no significant difference. Since the significant value of $t=0.457$ and $p= 0.6477$ respectively is more than 0.05 at 5% level of significant.

It means in terms of human resource perspective between Academician and Non- Academician of Jordanian universities, there is no significant difference. Even the mean (32.24 and 31.93) and standard deviation (6.098241 and 5.05571) is also quite similar. So, null hypothesis is rejected and alternate hypothesis is accepted.

The analysis regarding balance score card Perspective between Academician and Non- Academician reveals that there is significant difference. Since the significant value of $t=2.3928$ and $p= 0.0174$ respectively is more than 0.05 at 5% level of significant.

It means in terms of balance score card perspective between Academician and Non- Academician of Jordanian universities, there is significant difference. Even the mean (40.08 and 37.80) and standard deviation (8.427

and 7.598) is also quite similar. So, null hypothesis is accepted and alternate hypothesis is rejected.

Null hypothesis H_{0-3} : There is no significant difference in the perception towards Balanced Score Card on the basis of gender. *(Stands accepted)*

Further, the significant difference of this hypothesis is tested from the four different perspectives of Balance Score Card like Financial, internal process, customers and Human resources.

Null hypothesis $H_{0-3 A}$: There is no significant difference in the perception towards Balanced Score Card on the basis of General Perspectives. *(Stands rejected)*

Null hypothesis $H_{0-3 B}$: There is no significant difference in the perception towards Balanced Score Card on the basis of Financial Perspectives. *(Stands rejected)*

Null hypothesis $H_{0-3 C}$: There is no significant difference in the perception towards Balanced Score Card on the basis of Internal Process Perspectives. *((Stands rejected)*

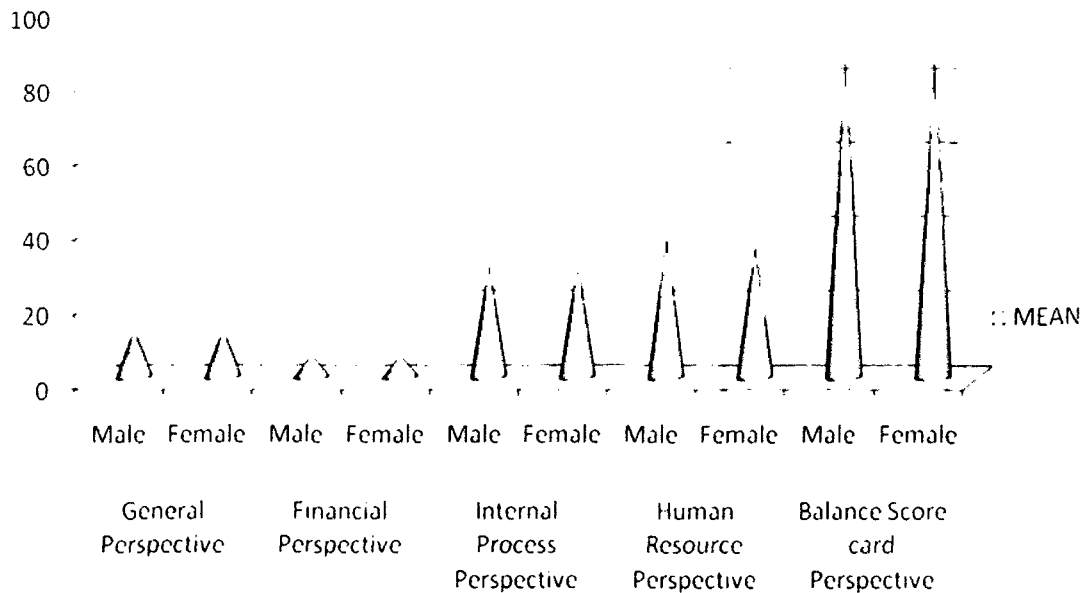
Null hypothesis $H_{0-3 D}$: There is no significant difference in the perception towards Balanced Score Card on the basis of Human Resources Perspectives. *(Stands rejected)*

df =286

Table-5.3 Analysis of various aspects of balance score card in regard to male and female of public and private sector universities

		N	MEAN	Standard Deviation	Standard Error Mean	t-Value	p-Value
General Perspective	Male	189	13.878	1.077	0.078	0.556	0.579
	Female	99	13.949	0.9408	0.094		
Financial Perspective	Male	189	6.0741	0.981	0.071	0.566	0.572
	Female	99	6.1414	0.9148	0.091		
Internal Process Perspective	Male	189	32.143	5.671	0.412	0.189	0.850
	Female	99	32.010	5.5979	0.563		
Human Resource Perspective	Male	189	39.593	8.1324	0.592	1.605	0.110
	Female	99	37.98	8.0432	0.808		
Balance Score card Perspective	Male	189	91.688	13.034	0.948	0.992	0.322
	Female	99	90.081	13.09	1.316		

Figure-5.3 Analysis of various aspects of balance score card in regard to male and female of public and private sector universities



The analysis regarding General Perspective between male and female reveals that there is no significant difference. Since the significant value of $t=0.556$ and $p=0.579$ respectively is more than 0.05 at 5% level of significant.

It means in terms of general perspective between male and female of Jordanian universities, there is no significant difference. Even the mean (13.878 and 13.949) and standard deviation (1.077 and 0.9408) is also quite similar. So, null hypothesis is rejected.

The analysis regarding financial Perspective between male and female reveals that there is no significant difference. Since the significant value of $t=0.566$ and $p=0.572$ respectively is more than 0.05 at 5% level of significant.

It means in terms of financial perspective between male and female of Jordanian universities, there is no significant difference. Even the mean (6.0741 and 6.1414) and standard deviation (0.981 and 0.9148) is also quite similar. So, null hypothesis is rejected.

The analysis regarding internal process Perspective between male and female reveals that there is no significant difference. Since the significant value of t is $=0.189$ and $p=0.850$ is more than 0.05 at 5% level of significant.

It means in terms of internal process perspective between male and female of Jordanian universities, there is no significant difference. Even the mean (32.143 and 32.010) and standard deviation (5.671 and 5.5979) is also quite similar. So, null hypothesis is rejected.

The analysis regarding human resource Perspective between male and female reveals that there is no significant difference. Since the significant value of $t=1.605$ and $p= 0.110$ respectively is more than 0.05 at 5% level of significant.

It means in terms of human resource perspective between male and female of Jordanian universities, there is no significant difference. Even the mean (39.593 and 37.98) and standard deviation (8.1324 and 8.0432) is also quite similar. So, null hypothesis is rejected.

The analysis regarding balance score card Perspective between male and female reveals that there is significant difference. Since the significant value of $t=0.992$ and $p= 0.322$ respectively is more than 0.05 at 5% level of significant.

It means in terms of balance score card perspective between male and female of Jordanian universities, there is significant difference. Even the mean (91.688 and 90.081) and standard deviation (13.034 and 13.09) is also quite similar. So, null hypothesis is accepted.

Null hypothesis H_{0-4} : There is no significant difference among the experience at present designation in terms of Balanced Scorecard. (*Stands accepted*)

Further, this hypothesis is tested from the four different perspectives of Balance Score Card like Financial, internal process, customers and Human resources.

Null hypothesis $H_{0-4} A$ There is no significant difference among the experience at present designation in terms of General Perspectives. (*Stands accepted*)

Null hypothesis $H_{0-4} B$ There is no significant difference among the experience at present designation in terms of Financial Perspectives. (*Stands accepted*)

Null hypothesis $H_{0-4} C$ There is no significant difference among the experience at present designation in terms of Internal Process Perspectives. (*Stands accepted*)

Null hypothesis $H_{0-4} D$ There is no significant difference among the experience at present designation in terms of Human Resources Perspectives. (*Stands accepted*)

df =287

Table-5.4 Analysis of various aspects of balance score card in respect to experience at present designation of public and private sector universities

		N	Mean	Std. Deviat	Std. Error	95% Confidence Interval for		Min.	Max.	F	Sig.
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Lower		
GT	1 - 5	176	13.92	.994	.075	13.77	14.07	10	10	1.059	.367
	6 - 10	86	13.90	1.085	.117	13.66	14.13	10	10		
	11 - 15	22	13.95	1.133	.242	13.45	14.46	11	11		
	16 - 20	4	13.00	.816	.408	11.70	14.30	12	12		
	Total	288	13.90	1.031	.061	13.78	14.02	10	10		
FT	1 - 5	176	6.05	.976	.074	5.91	6.20	3	3	1.859	.137
	6 - 10	86	6.27	.832	.090	6.09	6.45	4	4		
	11 - 15	22	5.91	1.151	.245	5.40	6.42	3	3		
	16 - 20	4	5.50	1.291	.645	3.45	7.55	4	4		
	Total	288	6.10	.958	.056	5.99	6.21	3	3		
IPT	1 - 5	176	34.47	4.837	.365	33.75	35.19	22	22	37.78	.000
	6 - 10	86	28.78	4.895	.528	27.73	29.83	20	20		
	11 - 15	22	27.14	3.821	.815	25.44	28.83	22	22		
	16 - 20	4	26.50	5.196	2.598	18.23	34.77	23	23		
	Total	288	32.10	5.637	.332	31.44	32.75	20	20		
HT	1 - 5	176	41.97	7.258	.547	40.89	43.05	24	24	25.15	.000
	6 - 10	86	34.94	7.432	.801	33.35	36.54	25	25		
	11 - 15	22	32.64	5.508	1.174	30.19	35.08	26	26		
	16 - 20	4	33.50	11.790	5.895	14.74	52.26	26	26		
	Total	288	39.04	8.124	.479	38.10	39.98	24	24		

The above mentioned Table 5.6 reveals that the analysis regarding General Perspective in respect to the experience at present designation reveals that there is no significant difference between public and private universities of Jordan. Since the significant value of (p) is 0.367 which is more than 0.05 at 5% level of significant. So, null hypothesis is accepted.

The analysis regarding Financial Perspective in respect to the experience at present designation reveals that there is no significant difference between public and private universities of Jordan. Since the significant value of (p) is .137 which is more than 0.05 at 5% level of significant. So, null hypothesis is accepted.

The analysis regarding Internal Process Perspective in respect to the experience at present designation reveals that there is no significant difference between public and private universities of Jordan. Since the significant value of (p) is 0.000 which is less than 0.05 at 5% level of significant. So, the alternate hypothesis is accepted.

The analysis regarding Human Resource Perspective in respect to the experience at present designation reveals that there is no significant difference between public and private universities of Jordan. Since the significant value of (p) is 0.000 which is less than 0.05 at 5% level of significant. So, the alternate hypothesis is accepted.

The analysis regarding Balance Scorecard Perspective in respect to the experience at present designation reveals that there is no significant difference between public and private universities of Jordan. Since the significant value of (p) is 0.000 which is less than 0.05 at 5% level of significant. So, the alternate hypothesis is accepted.

Null hypothesis H_0 -5: *There is no significant association between the financial policy of universities and the sector to which they belong. (Stands rejected)*

Using Chi- Square test

Table 5.5 Chi-square test for association between the financial policy of public and private sector universities							
Public/Private	Income Growth (a)	Cost reduction (b)	Assets Usage (c)	Others (d)	χ^2	df	p-Value
Public	6	19	91	27	150.5242	3	0.000
Private	66	62	17	0			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association between the financial policy of public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant. Since p-value is less than 0.05 (p-value as 0.000), there exist a strong association between degree of association in regard to financial policy of public and private universities of Jordan. So, null hypothesis is rejected.

Cross tabulation was conducted for measuring the degree of association in regard to financial policy as perceived. Commonly used cross tabulation was used here because it involves a simultaneous counting of the number of observations that occur in each of the data categories of two or more variable.

Null hypothesis H_{0-6} : *There is no significant association between the Average life cycle of facilities and equipments offered in the universities the sector to which they belong. (Stands rejected)*

Table 5.6 Chi-square test for association between Average life cycle of facilities and equipments offered in public and private sector universities							
Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	χ^2	df	p-Value
Public	2	32	75	34	66.57168	3	0.000
Private	47	47	40	11			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association between the average life cycle of facilities and equipments offered in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is less than 0.05 (p-value as 0.000), there exist a strong association between degree of association in regard to Average life cycle of facilities and equipments offered in public and private universities of Jordan. So, null hypothesis is rejected.

Null hypothesis H_{0-7} : *There is no significant association between average numbers of papers by academic staff published in a year in the universities the sector to which they belong. (Stands rejected)*

Table 5.7 Chi-square test for association between *average number of papers by academic staff published in a year* in public and private sector universities

Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	χ^2	df	p-Value
Public	22	24	35	31	81.04809	4	0.000
Private	70	41	30	1			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association between average number of papers by academic staff published in a year in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is less than 0.05 (p-value as 0.000), there exist a strong association between degree of association in regard to average number of papers by academic staff published in a year in public and private universities of Jordan. So, null hypothesis is rejected.

Null hypothesis H_0 -8: *There is no significant association between the percentages of International students enrolled in comparison to total number of students in the universities the sector to which they belong. (Stands rejected)*

Table 5.8 Chi-square test for association between the percentages of International students enrolled in a year in public and private sector universities

Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	χ^2	df	p-Value
Public	15	26	31	43	17.41216	4	0.002
Private	21	43	42	28			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association between the percentages of International students enrolled in a year in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is less than 0.05 (p-value as 0.002), there exist a strong association between degree of association in regard to the percentages of International students enrolled in a year in public and private universities of Jordan. So, null hypothesis is rejected.

Null hypothesis H_0 -9: *There is no significant association between the numbers of Conferences/ Seminars/ Workshops organized in a year in the universities the sector to which they belong. (Stands accepted)*

Table 5.9 Chi-square test for association in regard to Conferences/ Seminars/ Workshops organized in a year in public and private sector universities

Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	χ^2	df	p-Value
Public	16	33	40	30	2.595	5	0.762
Private	19	36	37	29			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association regarding Conferences/ Seminars/ Workshops organized in a year in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.762), there exist no association in regard to Conferences/ Seminars/ Workshops organized in a year in public and private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_0 -10: *There is no significant association between the average numbers of papers by academic staff published in ISI journals in a year in the universities the sector to which they belong. (Stands accepted)*

Table 5.10 Chi-square test for association in regard to average number of papers by academic staff published in ISI journals in a year in public and private sector universities

Public/ Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Public	115	19	3	3	3	7.864	4	0.096675
Private	133	9	1	1	1			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association in regard to average number of papers by academic staff published in ISI journals in a year in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.096675), there exist no association in regard to average number of papers by academic staff published in ISI journals in a year in public and private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_{0-11} : *There is no significant association between the average numbers of papers by academic staff published in refereed research journals in a year in the universities the sector to which they belong. (Stands accepted)*

Table 5.11 Chi-square test for association in regard to average number of papers by academic staff published in refereed research journals in a year in public and private sector universities								
Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Public	112	22	6	3	0	8.99	4	0.0613
Private	130	11	2	1	1			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association in regard to average number of papers by academic staff published in refereed research journals in a year in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.0613), there exist no association between degree of association in regard to average number of papers by academic staff published in refereed research journals in a year in public and private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_0 -12: *There is no significant association between the numbers of online programs offered in the universities the sector to which they belong. (Stands rejected)*

Table 5.12 Chi-square test for association in regard to number of online programs offered in public and private sector universities

Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Public	112	26	3	1	1	59.25648	4	0.000
Private	52	71	22	0	0			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association in regard to number of online programs offered in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is less than 0.05 (p-value as 0.000), there exist a strong association in regard to number of online programs offered in public and private universities of Jordan. So, null hypothesis is rejected.

Null hypothesis H_0 -13: *There is no significant association between the communications of the implementation of the performance measurement system to the employees of the universities the sector to which they belong. (Stands accepted)*

Table 5.13 Chi-square test for association between *average number of papers by academic staff published in a year* in public and private sector universities

Public/Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	χ^2	df	p-Value
Public	2	43	96	2	0.191	3	0.979
Private	3	43	97	2			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association in regard to communication of the implementation of the performance measurement system to the employees of the public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.979), there exist no association between degree of association in regard to communication of the implementation of the performance measurement system to the employees of the private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_0 -14: *There is no significant association between the deficiencies of performance measurement system in the universities the sector to which they belong. (Stands rejected)*

Table 5.14 Chi-square test for association in regard to deficiencies of performance measurement system in public and private sector universities

Public/ Private	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	d f	p-Value
Public	49	3	74	6	11	75.622 8	4	0.000
Private	37	4	25	3	76			

Upon analyzing various variables of balance score card in public and private universities, it is found that there is significant association in regard to deficiencies of performance measurement system in public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is less than 0.05 (p-value as 0.000), there exist a strong association between degree of association in regard to deficiencies of performance measurement system in public and private universities of Jordan. So, null hypothesis is rejected.

Null hypothesis H_0 -15: *There is no significant association between academicians and non-academicians in regard to average number of papers by academic staff published in a year in the universities the sector to which they belong. (Stand accepted)*

Table 5.15 Chi-square test for association between academician and non-academician in regard to average number of papers by academic staff in public and private sector universities

Academician/Non-Academician	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Academician	47	30	40	19	47	4.101941	4	0.392385

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association between academician and non-academician in regard to average number of papers by academic staff published in a year in the public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.392385), there exist no association between academician and non-academician in regard to average number of papers by academic staff published in a year in the private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_0 -16: *There is no significant association between academician and non-academician in regard to average number of papers by academic staff published in refereed research journals per year in the universities the sector to which they belong. (Stands accepted)*

Table 5.16 Chi-square test for association between academician and non-academician in regard to average number of papers by academic staff published in refereed research journals per year in public and private sector universities

Academician/ Non- Academician	Less than 2 years (a)	2 to 4 year s (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Academician	130	17	3	4	2	4.90039	4	0.29767

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association between academician and non-academician in regard to average number of papers by academic staff published in refereed research journals per year in the public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.297672), there exist no association between academician and non-academician in regard to average number of papers by academic staff published in refereed research journals per year in the private universities of Jordan. So, null hypothesis is accepted.

Null hypothesis H_0 -17: *There is no significant association between academician and non-academician in regard to number of online programs offered in the universities the sector to which they belong. (Stands accepted)*

Table 5.17 Chi-square test for association between academician and non-academician in regard to number of online programs offered in public and private sector universities

Academician/ Non- Academician	Less than 2 years (a)	2 to 4 years (b)	4 to 6 years (c)	More than 6 years (d)	I don't Know (e)	χ^2	df	p-Value
Academician	128	20	5	3	0	2.81431	4	0.589365

Upon analyzing various variables of balance score card in public and private universities, it is found that there is no significant association between academician and non-academician in regard to number of online programs offered in the public and private sector universities of Jordan. Statistical analysis of the data was done using the Chi-square test to see whether the observed association between the variable is statistically significant or not. Since p-value is more than 0.05 (p-value as 0.589365), there exist no association between degree of association between academician and non-academician in regard to number of online programs offered in the private universities of Jordan. So, null Hypothesis is accepted.

Summarized results of Tested Hypotheses: Further, the tested hypotheses are summarized in the following table:

Table 5.18 Summary Statement of Testing of hypothesis

Hypotheses	Accepted/ Rejected
Null hypothesis H_0-1: There is no significant difference between the public and private universities of Jordan in terms of Balance Score Card (BSC).	Rejected
Null hypothesis $H_0-1 A$: There is no significant difference between the public and private universities of Jordan in terms of General perspectives of Balance Score Card (BSC).	Accepted
Null hypothesis $H_0-1 B$: There is no significant difference between the public and private universities of Jordan in terms of Financial Perspectives.	Accepted
Null hypothesis $H_0-1 C$: There is no significant difference between the public and private universities of Jordan in terms of Internal Process Perspectives.	Rejected
Null hypothesis $H_0-1 D$: There is no significant difference between the public and private universities of Jordan in terms of Human Resources Perspectives.	Rejected
Null hypothesis H_0-2: There is no significant difference between the academicians and non-academicians in terms of Balance Score Card (BSC).	Rejected

Null hypothesis H₀-2 A: There is no significant difference between the academicians and non-academicians in terms of General Perspectives.	Accepted
Null hypothesis H₀-2 B: There is no significant difference between the academicians and non-academicians in terms of Financial Perspectives.	Rejected
Null hypothesis H₀-2 C: There is no significant difference between the academicians and non-academicians in terms of Internal Process Perspectives.	Accepted
Null hypothesis H₀-2 D: There is no significant difference between the academicians and non-academicians in terms of Human Resource Perspectives.	Accepted
Null hypothesis H₀-3: There is no significant difference between the Male and Female in terms of Balance Score Card.	Rejected
Null hypothesis H₀-3 A: There is no significant difference between the Male and Female in terms of General Perspectives.	Accepted
Null hypothesis H₀-3 B: There is no significant difference between the Male and Female in terms of Financial Perspectives.	Accepted
Null hypothesis H₀-3 C: There is no significant difference between the Male and Female in terms of Internal Process Perspectives.	Accepted

Null hypothesis H₀-3 D: There is no significant difference between the Male and Female in terms of Human Resources Perspectives.	Accepted
Null hypothesis H₀-4: There is no significant difference among the experience at present designation in terms of Balance Score Card.	Accepted
Null hypothesis H₀-4 A: There is no significant difference among the experience at present designation in terms of General Perspectives.	Accepted
Null hypothesis H₀-4 B: There is no significant difference among the experience at present designation in terms of Financial Perspectives.	Accepted
Null hypothesis H₀-4 C: There is no significant difference among the experience at present designation in terms of Internal Process Perspectives.	Accepted
Null hypothesis H₀-4 D: There is no significant difference among the experience at present designation in terms of Human Resources Perspectives.	Accepted
Null hypothesis H₀-5: There is no significant association between the financial policy of universities and the sector to which they belong.	Rejected
Null hypothesis H₀-6: There is no significant association between the Average life cycle of facilities and equipments offered in the universities the sector to which they belong.	Rejected

Null hypothesis H_0 -7: There is no significant association between averages numbers of papers by academic staff published in a year in the universities the sector to which they belong.	Rejected
Null hypothesis H_0 -8: There is no significant association between the percentages of International students enrolled in comparison to total number of students in the universities the sector to which they belong.	Rejected
Null hypothesis H_0-9: There is no significant association between the numbers of Conferences/ Seminars/ Workshops organized in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H_0-10: There is no significant association between the average numbers of papers by academic staff published in ISI journals in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H_0-11: There is no significant association between the average numbers of papers by academic staff published in refereed research journals in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H_0-12: There is no significant association between the numbers of online programs offered in the universities the sector to which they belong.	Rejected
Null hypothesis H_0-13: There is no significant association between the communications of the implementation of the performance measurement system to the employees of the	Accepted

universities the sector to which they belong.	
Null hypothesis H₀-14: There is no significant association between the deficiencies of performance measurement system in the universities the sector to which they belong.	Rejected
Null hypothesis H₀-15: There is no significant association between academican and non-academican in regard to average number of papers by academic staff published in a year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-16: There is no significant association between academican and non-academican in regard to average number of papers by academic staff published in refereed research journals per year in the universities the sector to which they belong.	Accepted
Null hypothesis H₀-17: There is no significant association between academican and non-academican in regard to number of online programs offered in the universities the sector to which they belong.	Accepted

On the basis of collected information with the help of questionnaires, the data have been tested by using suitable statistical tools. The hypotheses which have been accepted or rejected have also been summerised in the form of the table. The summary of conclusions, findings and recommendations etc. have been given in the next chapter along with the scope for further research in this field.

Table-5.19 Summary of major findings

Dimensions	Government Universities	Private Universities
Satisfaction of students and staff members	Not satisfied	Satisfied
Internal Processing of Procedural Work	Not Satisfactory	Satisfactory
HR policies	Not Satisfactory	Satisfactory
Financial Budgets	Not linked to vision/ mission of universities	Linked to the vision/ mission of universities
Financial Procedure	Not Satisfactory	Satisfactory
Infrastructure (Latest books, journals, magazines, etc.)	Satisfactory	Not Satisfactory
Performance Evaluation of Employees	No performance evaluation	Performance is evaluated
Opportunities to develop	Satisfactory	Not Satisfactory
Dimensions	Government Universities	Private Universities

1. Most of the students and staff members are not satisfied with the working of the Government universities due to the less caring attitude of the government. The Government universities must change their attitude. They should pay attention to the needs and worries of their employees. They should treat their employees as family members. This will make employees feel that they are working for someone who cares for them. This results in employee satisfaction and employee retention.

2. The internal processing of different procedural work takes time in Government universities. The government universities need to be more efficient in completing their tasks to save time. This will help them to have more satisfied students and employees.
3. Government universities should address the dissatisfaction of their employees with regard to their promotion and remuneration. Improving on these aspects will result in employee retention leading to employee satisfaction, student's satisfaction and competitive market share.
4. The financial budgets should be linked with the mission/ vision. The universities in public sector in Jordan need to link their financial budgets to the department/university's qualitative performance.
5. The study shows private sector universities in Jordan are financially sound as compared to Government universities. Public sector universities should make sure that sanctioning of the funds to the specific need in the university, should not take unnecessarily long time. There is immediate need to improve their efficiencies to compete with the private sector universities in Jordan.
6. In this competitive environment, the universities should provide the basic infrastructure to the students and employees. Existing infrastructure of universities must be updated. Latest books, journals, magazines, communication system, modern means of teaching, Electronic mail (e-mail), voice mail, the web, or other technology, human resources information system, training etc. should be provided to the students in order to provide better education.
7. In Human Resource Management, performance evaluation plays a very vital role. It helps the employees to know the areas where they can improve. Like private sector universities, public sector universities must evaluate the performance of their employees and teaching staff. This will

help them improve their performance resulting in better presentation of their abilities and skills.

8. The Government universities in Jordan are providing better opportunities to develop or improve the skills than that of private sector universities. In order to make their staff and teachers as competitive as the employees of public sector universities, the private sector universities must also offer faculty development programs, orientation/ refresher courses in academic staff colleges at reasonable cost and by providing the leave facilities. This will help them widen their scope of knowledge and perform better in their duties.

Chapter-6

Summary of Conclusions, Findings of the Study, Recommendations and Scope for Further Research

- 6.1 Introduction**
- 6.2 Summary of conclusions**
- 6.3 Findings of the Study**
- 6.4 Recommendations**
- 6.5 Directions for further Research**

Chapter-6

Summary of conclusions, Findings, Recommendations and Direction for Future Research

6.1 Introduction: In the previous chapter, the hypotheses of this study have been tested by using suitable statistical tools like t-test, ANOVA and chi square test. The final results after testing the hypotheses have also been summarized in the form of a table showing whether a particular hypothesis is accepted or rejected. This chapter deals with the Summary of major findings of the study, recommendations of this study. This chapter also includes the areas which have been emanated or explored for further research.

6.2 Summary of conclusions

A balanced scorecard measures performance across multiple areas of an organization, all linked directly to the organization's strategy and vision. Rather than focus solely on a single factor such as financial earnings, a balanced scorecard considers an organization's performance in multiple key strategic and operating areas. The linkage of strategy to the organization's operating activities is key to the balanced scorecard system.

The Balanced Scorecard tool is an attempt to deal with these types of issues. It was originally designed as a tool for measuring performance that developed into a new strategic management control system, which helped implement the company's strategy. The aim of the Balanced Scorecard is basically to translate the strategy into action. It supplements traditional financial measures with criteria that measure performance from three additional perspectives - those of customers, internal business processes, and learning and growth. It is also used as a system for communication, information and learning. It therefore enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they will need for future growth.

A balanced scorecard vision or philosophy is simply a clear statement that describes what BSC will look like, how it will operate, how it will be built, and how the organization will use it. When created early in the balanced scorecard development process, your BSC vision provides a valuable touchstone going forward providing focus and facilitating quick consensus when critical balanced scorecard decisions are required.

The overall objective of the thesis was to analyze the use of Balanced Scorecard in HR and performance measurement tool in Jordan including public and private sector universities. The Balanced Scorecard may be described as a strategy-driven measurement system that retains traditional financial measures, but adds also the perspectives of present and potential (future) value of a company, namely its customers, suppliers, employees, processes, technology, and innovation.

By its nature the four-fold division of the Balanced Scorecard into the perspectives of a) financial, b) internal business processes, c) learning and growth, and d) clients, has nothing especially new. Internal business processes have been targeted by several quality management systems. Learning and growth has been analysed by a few trends under knowledge management. Academic and Non-academic staff also have been subject to several kinds of statistical and non-statistical researches. The main objective of the Balanced Scorecard is to bring those different perspectives together into a uniform system that would enable to measure them in a balanced way that is derived from the strategic objectives of an organisation.

The first university in Jordan was established in 1962 and then many public and private universities were established in the kingdom totaling 26 in the year 2007; of them ten are public universities and sixteen are private universities, among them four universities are specialized in postgraduate studies. The government has issued a series of laws concerning higher education and Jordanian universities. Al- Balqa' Applied University (BAU) was founded in 1997, a distinctive state university in the field of Bachelor and Associate degree Applied Education, at the capacity of 21,246 student

distributed into 10,000 at the Bachelor degree program and 11,000 at the Associate degree program. Al-Ahliyya Amman University is a university located in Amman, Jordan. It is the leading private university in Jordan. Al Ahliya Amman University is the first privately funded and managed university to be established in Jordan. Since its founding year in 1990, this university has set a role model for launching many other privately owned universities in Jordan and in the Middle East.

All together 288 questionnaires were collected from teaching as well as nonteaching staff from two private and two government universities of Jordan. While analyzing the information collected from public and private sector universities of Jordan through questionnaire, Researcher came to the conclusion that in Government universities the students are not satisfied with the kind of facilities provided. But still student's first preference is to get education from the government universities of big cities of Jordan. On the other hand, students in other small cities prefer to get admission in private universities but this preference is confined. As far as the implementation of the Balanced Scorecard system is concerned, the private universities are far ahead as compare to the Government universities.

The researcher goes through detailed steps in implementing the Balanced Scorecard and during that researcher advises on practical questions which may arise in implementing the Balanced Scorecard for the first time in government and private universities of Jordan.

The balanced scorecard is a tool which systematically expands the measurement areas traditionally involved in accounting. It thus aims to contribute to reducing the problems involved in using only financial measures for the purposes of control. It is not just intended as a measurement system, however; it is also a control system. It inserts non-financial measurements in a strategic control framework so that they are not merely loosely coupled local systems, but linked together in a causal chain which passes through the entire company. It may contribute to sharpening communication in the company in that it is not restricted to financial measures but also includes non-financial

ones, which provides a more comprehensive picture of the company. Therefore, it is a way of changing communication about strategy since this will no longer be restricted to financial measures. This aspect is both very interesting and relevant. The preceding analysis shows, however, that the balanced scorecard has problems with some of its key assumptions and relationships.

In researcher's opinion, the Balanced Scorecard methodology may be regarded as the most practical management tool since the SWOT analysis. Therefore, the universities who are willing to remain competitive during today's shift from conventional to information age education will have to start consider implementing the Balanced Scorecard. From the possible research resources from , research projects, journals, magazines, theses, articles, Internet and major international business journals, it was possible to identify that throughout the world has the Balanced Scorecard received very warm welcome among numerous very prestigious universities of the world. The number is constantly growing every day.

The researcher found in the thesis show that the Balanced Scorecard may be considered as one of the best remedies in tackling with the questions concerning:

- Linking strategic vision and long-term objectives to short term tactics of the universities.
- Directing sophisticated and different critical paths of success in the light of strategic management.
- Efficient performance measurement of teaching and non teaching staff.
- Review of strategic vision in the light of day-to-day operations management.

The Balanced Scorecard is definitely a useful tool to renew university's mission and strategic objectives. Multilevel analysis of organisational strategy helps to identify possible shortcomings and flaws of existing objectives.

Second, the Balanced Scorecard has proven its usefulness also as a two-way communications tool that enables to pass information more easily to all the members of a university, as every member's task in formulating the educational information is certainly much higher than in the case of centralised strategic management systems. At the same time, the Balanced Scorecard simplifies the analysis of monthly performance review and compares the results of the review with strategic objectives.

Balanced Scorecard turns the activities of an organisation much more efficient as its every member is more aware and committed to the strategy. In the end, it avoids performing many tasks that are not in line with objectives and members start to diminish less important assignments that do not contribute to goals. As one of negative impacts of the Balanced Scorecard it may be noted slowing down of some strategic planning processes, because discussions on so many levels of management undoubtedly takes some time. The second problem is increasing time constraints, because some increase in bureaucracy and increase in reporting.

However, to diminish those backlogs it is definitely recommended to use an information-technology based solution in implementing Balanced Scorecard.

6.3 Findings of the Study:

After a comprehensive study of public and private sector universities in Jordan with the help of information obtained through questionnaires, the followings are the findings of this research work:

- Most of the students and staff members are not satisfied with the working of the Government universities due to the less caring attitude of the government. On the other hand most of the students and staff members are satisfied with the facilities and infrastructure provided by the private universities of Jordan though the private universities are comparatively costly for the students.
- The internal processing of different procedural work is taking so much time to completion in Government universities. On the other hand private

universities of Jordan having better processing thus giving more satisfaction to their students and staff members.

- Employees are not satisfied regarding their promotion as well as their remuneration in Government universities.
- In government universities, there is little consideration given to vision/mission of the universities. Thus, the financial budgets of the department/university are not linked to the department/university's qualitative performance.
- Private sector universities in Jordan are financially sound as compared to Government universities. There is lot of procedural delay in sanctioning the fund to the specific need in the government universities. Thus, the private universities are known for their efficiencies as compared to the Government universities of Jordan.
- The available facilities of the private sector universities in Jordan are better than that of Government universities like latest books, journals, magazines, communication system, adopting modern means of teaching, Electronic mail (e-mail), voice mail, the web, or other technology, human resources information system, training etc.
- There is no performance evaluation of the employees and teachers in government universities. On the other hand, in private sector universities, the management is so much concerned with the quality education by adopting the performance evaluation method to give incentives to hard working staff members.
- The Government universities in Jordan are providing better opportunities to develop or improve the skills than that of private sector universities by offering faculty development programs, orientation/ refresher courses in academic staff colleges at reasonable cost and by providing the leave facilities. On the other hand such kinds of facilities are missing in private universities of Jordan.

- There is no significant difference between the academicians and non-academicians of public and private universities of Jordan in terms of General Perspectives, Financial Perspectives, Internal Process Perspectives and Human Resource Perspectives of Balance Score Card (BSC).
- There is no significant difference between the Male and Female of public and private universities of Jordan in terms of General Perspectives, Financial Perspectives, Internal Process Perspectives and Human Resource Perspectives of Balance Score Card.
- There is significant difference among the experience at present designation of public and private universities of Jordan in terms of Internal Process Perspectives and Human Resource Perspectives of Balance Score Card but found to be significant difference in regard to General Perspectives and Financial Perspectives of Balance Score Card.
- There is significant association between the financial policy of universities, Average life cycle of facilities and equipments offered, average number of papers by academic staff published in a year, percentages of International students enrolled in comparison to total number of students, deficiencies of performance measurement system in the Public and Private sector universities of Jordan. But there is no significant association between Conferences/ Seminars/ Workshops organized in a year, average number of papers by academic staff published in ISI journals, average number of papers by academic staff published in refereed research journals, managerial accounting indicators used in order to assist the University's assessment of customer (students) satisfaction policy, number of online programs offered and communication of the implementation of the performance measurement system to the employees in a year in the universities of Public and Private sector of Jordan.

- The employees have better preference to work in the Government University than private universities of Jordan due to the better remuneration and retirement benefits.

6.4 Recommendations: After analyzing the results of the questionnaires, the following recommendations are given by the researcher:

- Adoption of the balance scorecard in government universities requires proper attention. It is not properly adopted as compared to the private universities. Now the time has come in this liberalized era that government universities should also adopt balance scorecard to achieve the set target.
- The employee scorecard should be closely integrated with the assigned task, thus keeping the entire organisation focused on the same agreed set of objectives/ mission.
- Teaching, non-teaching employees and students should be involved in the development of the measures, since their participation will inspire them to improve the standard of the university and thus will help in accomplishing set standards.
- In the presence of unions (Teaching, non-teaching employees and students), the union officials should be included in the earliest discussion of the measurement system. Union officials should be assured that the system gives employees more, not less, control over their jobs.
- Measures selected must be in real time so that employees can respond and solve problems on the spot. Measures selected should focus on the critical aspects of performance. New measures that are introduced should be balanced with the other scorecard measures.
- Communicate the measures to all the staff, and provide updates on a more frequent basis. They need to be communicated simply and easily, from the top down. For example, the head of the department could distribute a Balanced Scorecard Report quarterly to all staff, with a cover memo explaining what the measurements mean and how the department

is doing. Supervisors could use the report to generate discussion and understanding about the Balanced Scorecard program on a quarterly basis during staff meetings.

- Continue development of Balanced Scorecard at the area levels should fold into higher-level departmental measures, just as annual employee evaluation goals fold into department measures.
- Employee reviews should be done in a Balanced Scorecard format – especially the goals for the next review period. By incorporating the four perspectives of the department's BSC, the individual employees will gain an understanding of how they each contribute to the Facilities Services Balanced Scorecard Strategic Plan. An example of an Innovation and Learning individual employee goal may be: foster a learning environment where employees are encouraged to develop their skills to meet the demands of the future; show evidence of coaching employees to improve their knowledge and services (such as encouraging employees to attend appropriate training sessions, computer skills updates, etc.).
- Measures need to be established including overall scores for students' satisfaction from the students' Satisfaction Surveys, as well as from discussion to measure and assess each of the departments.
- Develop a Continuous Quality Improvement (CQI) team which could provide suggested plans of action to the appropriate person as well as help in communicating the Balanced Scorecard information throughout the various departments of the university.
- Develop a Continuous Quality Improvement (CQI) team which could provide suggested plans of action to the appropriate person as well as help in communicating the Balanced Scorecard information throughout the various departments of the university.
- Incorporate Balanced Scorecard into the culture of the departments of the university. It must be the backbone for individual performance evaluations; employee, teacher and department goals; funding requests; celebrations; etc. Individual goals must align with department goals; department goals must align with faculty goals; faculty goals must align with the universities'

goals in order for change to be effective and act as a driving force behind the achievement of the universities' strategy. For the Balanced Scorecard to truly be successful, continuous quality improvement must be a powerful force in the culture of the university.

- In addition, BSC measures should be entered into the computer so that current figures can be accessed instantly by people in different departments and at different levels of the university. Incentive-related pay should also be linked to a few high-level goals as this encourages the use of the balanced scorecard as a tool to help management teams achieve these high level goals. Linking a large proportion of the balanced scorecard elements to incentive pay not only discourages the initial selection of risky objectives, it also discourages management from changing their balanced scorecard during the course of an incentive period if they are already meeting the target values. If incentive pay is linked only to some overall measures of success, then the university administration will likely use the balance scorecard information to generate the improved performance required to achieve the overall measure.
- The performance measurement system design should be directly related to the university's main strategy and non-financial measures should be adopted.
- There are potential areas for further refinement and research into the balanced scorecard. Currently, theories of strategic control methods and practice are developed separately from theories relating to performance management. Therefore, more refinement is needed in matching understanding of how management behaviour can be influenced by performance measurement data to better facilitate management interventions. A university's performance measurement system often covers its entire working. There should be an examination of the ways to reconcile performance reporting with performance management. Lastly, the characteristics of university that successfully implement performance management are not well known. Studies should be undertaken to deepen understanding of the factors that encourage or inhibit the adoption of advanced performance management systems.

6.4 Directions for Future Research

The present research on the comparative study of Balance Score card in government and private universities of Jordan explored many issues in line with the objectives set for the study. The present study has focused on many dimensions of balance score card in the education system of Jordan. On the basis of primary data, a number of aspects of balance score card were analysed. But still I feel that a multi directional expansion with focus on related areas is possible. In the context of limitations of the study, and the experience gained during the study, some of the potential areas are identified for future researches. Potential areas for research have been identified in the following areas:

- To generalize the findings of the study, a broad representative sample may be taken. Sample size could be increased covering all the hierarchical levels of teaching and non-teaching staff as well as students of the government and private universities of Jordan.
- The coverage of many other universities and colleges under higher education of Jordan may be done. Not only the universities but many other important ingredient of effective and efficient service, such as hotel, tourism, banking, insurance, IT etc., to name a few, could be studied.
- Even the approach of balance score card in the high school and higher secondary education system of Jordan should also be studied. If it is difficult than the feasibility analysis must be done in regard to introducing it in schools.
- The present research work is in the field of service sector. The balance score card approach can also be introduced in manufacturing sector also. It will definitely be a good move if it is properly implemented with some required modifications.
- The present work deals with the comparative study between government and private sector universities of Jordan. Similarly a comparative study can also be made between universities and some other major public utility concerned like water, electricity or transport organizations to find the most effective application of balance score card approach to understand the

phenomenon in depth, its effects on organizational performance and effectiveness, identifying negative aspects and their affect, an exhaustive case based study of different concerned could be carried out.

- Research done in the form of academic- industry interface would contribute towards generating new knowledge and clarity of concept, at the same time, it would help the organizations to decipher their own assumptions when a cultural analysis becomes relevant for some problems that the organization is trying to solve.
- The balance score card approach and its implementation with effectiveness is another area where special attention and innovations should also be made. Atleast researches should be carried out in the existing system of balance score card approach to make it applicable in different kinds of organisations. Rather efforts should be made to bring flexibility in the balance score card approach.
- Everywhere the balance score card approach has been used even in different organizations, but some more possible action plans should be carried out or research could be conducted to help the organizational members to analyze the culture, prepare a profile, and make action plan to deal with weak aspects. This could be done in steps.
- The balance score card approach may wholly applied to make a comparative study of the students' perception in the government and private universities of Jordan. Thus, the present research study has substantial scope of extension in terms of both quantitative and qualitative dimensions in regard to the balance score card approach.
- Mostly people have got a perception that teachers and students are the backbone for the effectiveness for the universities. But we should not forget that non-teaching staff play a very important role in making the university smooth and efficient in terms of procedural work. Quick processing is the main criteria for judging the quality of any service provider. Thus, further there is good scope for the researcher to carry out the research work considering non-teaching staff as key factor. This study may be carried out by analyzing the impact of balance score card approach on the performance of non-teaching staff. Again to simplify the

research work a comparative study can be made between two different organisations where in one balance score card approach has been implemented and in another balance score card approach has not been introduced to check the impact properly and to know the effectiveness of the balance score card approach.

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Appendix-A: Locations of the four universities (Two from Government and two from private sector) of Jordan.



Appendix-B

QUESTIONNAIRE (English)

Part-A

Sir/Madam

I am working on a research paper for PhD titled on **Balanced Scorecard**

Approach to Human Resource Management- A study of Select universities

. For the purpose of my research analysis I have prepared a questionnaire. You are requested to please answer the questions contained in the questionnaire. Information provided by you will be used only for research purpose.

Strongly Agree (SA) = 5, Agree (A) = 4, Neither Agree Nor Disagree (NAND)= 3, Disagree (D) = 2, Strongly Disagree (SD) =1

S.No	Items	SA	A	NAND	D	SD
G1	My department has vision/ mission statement.	5	4	3	2	1
G2	My work priorities are based on my department's vision/ mission statement.	5	4	3	2	1
G3	I understand how my department contributes to the campus as a whole	5	4	3	2	1
F1	The financial budgets of the department/university are influenced by the department/university's qualitative performance?	5	4	3	2	1
F2	It is important for the University to establish a link between the strategic objectives and the financial budgets?	5	4	3	2	1
F3	My university is financially sound.	5	4	3	2	1
F4	I agree that the stakeholders must know and must be connected to the University's strategy?	5	4	3	2	1
IP1	The latest books, journals and magazines are available in the library.	5	4	3	2	1
IP2	The books/materials/publications required by the students are available.	5	4	3	2	1

IP3	I agree that improving the University's performance is closely linked to the existent degree of communication between all organizational levels?	5	4	3	2	1
IP4	The university is adopting modern means of teaching.	5	4	3	2	1
IP5	Proper efforts are made to identify the requirements of the students time to time?	5	4	3	2	1
IP6	I have to programme that help me balance my home and work responsibilities (e.g. use of vacation leaves)	5	4	3	2	1
IP7	Information necessary for me to do my job flow freely, honestly and respectfully within my immediate work unit	5	4	3	2	1
IP8	Informal, personal contacts, friends, other co-workers etc. provides me with information to do my job.	5	4	3	2	1
IP9	Electronic mail (e-mail), voice mail, the web, or other technology provides me with information to do my job.	5	4	3	2	1
IP10	In my department most decisions are made by discussing with everyone and arriving at a solution that everyone supports.	5	4	3	2	1
IP11	The people in my immediate work unit share their knowledge with each other; we develop way to solve the problems.	5	4	3	2	1
IP12	When working with a team, the team members accept the difference of opinion and commit themselves to work together.	5	4	3	2	1
IP13	I am satisfied with how performance standards are communicated and executed in my immediate work unit.	5	4	3	2	1
C1	The number of hours provided for students are sufficient.	5	4	3	2	1
C2	We routinely gather input from our students about the quality of our work and how satisfied they are with our services in my immediate work unit	5	4	3	2	1
C3	When students are not satisfied with our services, we promptly correct the situation in my immediate work unit	5	4	3	2	1

C4	My supervisor is easy to approach or speak to and provides me with information to do my job.	5	4	3	2	1
C5	I am satisfied with the infrastructure of the department.	5	4	3	2	1
H1	The management of the University should give interest in understanding the relationships and the existent conditions between different organizational levels, departments, and staff?	5	4	3	2	1
H2	Students are satisfied from university administrative staff performance.	5	4	3	2	1
H3	Ratio of students to academic staff in bachelor degree programs is satisfactory.	5	4	3	2	1
H4	Ratio of students to academic staff in master and PhD degree programs is satisfactory.	5	4	3	2	1
H5	I agree that establishing the value of staff and intangible assets is important?	5	4	3	2	1
H6	It is necessary to consider the extended value chain in the managerial system i.e. the role of the personnel, suppliers and the community?	5	4	3	2	1
H7	Do you think that your university is having appropriate human resources information system?	5	4	3	2	1
H8	I am satisfied with my job.	5	4	3	2	1
F9	I think my pay rate is appropriate	5	4	3	2	1
H10	I have opportunities to develop or improve my skills	5	4	3	2	1
H11	Formal discussion with co-workers in my immediate work unit provides me with information to do my job.	5	4	3	2	1
H12	Group meeting provide me with useful information to do my job.	5	4	3	2	1
H13	I am satisfied with the opportunities I have to increase my job related skills and knowledge.	5	4	3	2	1
H14	I have received enough training to know how to perform my job.	5	4	3	2	1
H15	My job makes good use of my skills and abilities.	5	4	3	2	1
H16	Leaders in my immediate work unit have explained clearly the scope of my department's involvement and importance	5	4	3	2	1

H17	Leaders in my immediate work unit talk about how future changes will affect how we will do our work.	5	4	3	2	1
H18	Leaders in my immediate work area allow employees to do work independently.	5	4	3	2	1
H19	Leaders in my immediate work unit encourage employees to make recommendations.	5	4	3	2	1
H20	There are opportunities for employees with leadership abilities to be mentored.	5	4	3	2	1
H21	Leaders in my immediate work unit contribute to a team efforts in getting our work done.	5	4	3	2	1
H22	When people in my immediate work unit have problem working with each other, we develop way to solve the	5	4	3	2	1
H23	I have clear goal defined for my job.	5	4	3	2	1
H24	My supervisor has a clear understanding of what I accomplish in my job.	5	4	3	2	1
H25	The way I do my work/ my overall job performance (accurately with quality, on time, dependably, etc.) determines my merit increase and/ or incentive awards.	5	4	3	2	1

Part- B

1. What indicators should be used in order to assist the University's financial policy?
 - a. Income growth b. Costs reduction c. Assets usage
 - (the strategy for investments) d.
 - Other _____
2. Average life cycle of facilities and equipments offered in the university are:
 - a. Less than 2 years b. 2 to 4 years c. 4 to 6 years
 - More than 6 years e. I don't know
3. Average no. of papers by academic staff published in a year.
 - a. Less than 2 b. 2 to 4 c. 4 to 10
 - b. More than 10 e. I don't know
4. The percentage of International students enrolled in comparison to total number of students in the university.
 - a. Less than 5% b. 5% to 10% c. 10% to 20%
 - d. More than 20% e. I don't know
5. Conferences/ Seminars/ Workshops organized by the university per year.
 - a. Less than 2 b. 2 to 4 c. 4 to 10 d. More than 10 e. I don't know
6. Average no. of papers by academic staff published in ISI journals per year.
 - a. Less than 2 b. 2 to 4 c. 4 to 10 d. More than 10 e. I don't know
7. Average no. of papers by academic staff published in refereed research journals per year.
 - a. Less than 2 b. 2 to 4 c. 4 to 10 d. More than 10 e. I don't know
8. What indicators should the managerial accounting use in order to assist the University's assessment of customer (students) satisfaction policy?

Market share; b. Number of students; c. Customer satisfaction (students); d. Customer turnover (students);

9. No. of online programs offered by school

- a. Less than 2 b. 2 to 4 c. 4 to 10 d. More than 10 e. I don't know

10. How does the university communicate the implementation of the performance measurement system to the employees of the university? (Select all that apply)

- a. Brochures b. Newsletters c. Memo d. Did not communicate
Information session f. I don't know g. Others

11. In your opinion what are the deficiencies of your performance measurement system? (Select any one?)

- a. Too many measures b. Too few measures
c. Does not contain the appropriate measures
d. There are no limitations e. I don't know

Personal Information

- a. Name of the University:
b. Experience at present designation:
c. Total experience
d. Present Designation and place of post
e. Gender
f. Age

Thanks

Appendix-C

QUESTIONNAIRE (Arabic)

الجزء الاول

انا طالب دكتوراه وعنوان بحثي هو : " نظرة بطاقة النتائج المتوازنة إلى الموارد البشرية - دراسة الجامعات المختاره " ولهذا الغرض ارجو منكم الاجابة على الاستبانة علماً بأن المعلومات سوف نستخدم للاغراض البحث العلمي.

الرقم	البيان	أوافق	لا	موافق	تتفق في
G ₁	القسم الذي اعمل به لديه رؤية / مهمة / خطة .				
G ₂	أولويات عملي تقوم على الخطة (الرؤية) المحددة من القسم.				
G ₃	لدي فهم عن كيفية مساهمة القسم في العمل الجامعي بشكل كلي.				
F ₁	الميزانية المالية للجامعة / القسم تتأثر بالاداء النوعي للقسم / الجامعة.				
F ₂	من المهم للجامعة انشاء أو ايجاد رابط بين الاهداف الاستراتيجية والميزانية المالية.				
F ₃	لدى جامعتي تمويل مناسب .				
F ₄	اوافق على أن اصحاب القرار يجب ان يرتبطوا بالاهداف الاستراتيجية للجامعة.				
IP ₁	تتوافر احدث الكتب والمجلات والدوريات في المكتبة.				
IP ₂	تتوافر الكتب والمواد (الابحاث) المنشورة التي يحتاجها الطالب في المكتبة.				

					<p>IP₃</p> <p>أوافق على أن تطوير أداء الجامعة مرتبط ارتباطاً وثيقاً وذلك بوجود قدر كبير من الاتصال بين كافة دوائر الجامعة.</p>
					<p>IP₄</p> <p>تتبنى الجامعة أساليب تدريس حديثة .</p>
					<p>IP₅</p> <p>جهود مناسبة تبذل لتحديد احتياجات الطلاب من وقت لآخر .</p>
					<p>IP₆</p> <p>لدي قدره تساعدني على الموازنة بين واجبات العمل والبيت مثل استخدام وقت العطل والاجازات .</p>
					<p>IP₇</p> <p>تنساب المعلومات التي احتاج اليها للقيام بعملية بحرية وصدق واحترام من زملائي في العمل .</p>
					<p>IP₈</p> <p>الاتصال المباشر والاتصال غير الرسمي مثل الاصدقاء وزملاء العمل يزودني بالمعلومات للقيام بعملية .</p>
					<p>IP₉</p> <p>البريد الالكتروني والصوتي والمواقع الالكترونية تزودني بالمعلومات للقيام بالمعلومات .</p>
					<p>IP₁₀</p> <p>تتخذ معظم القرارات في قسمي من خلال المناقشات مع كل فرد للوصول الى قرار بدعم من الجميع .</p>
					<p>IP₁₁</p> <p>زملائي في العمل يتبادلون المعرفة فيما بينهم بحيث تطور طريقة لحل المشاكل .</p>
					<p>IP₁₂</p> <p>يتقبل أعضاء الفريق الاختلاف في الرأي ويلزمون انفسهم بالعمل معاً عندما نعمل بشكل جماعي .</p>
					<p>IP₁₃</p> <p>انا راض عن معايير الاداء وحجم العمل المنجز في الدائرة التي اعمل بها .</p>

					C ₁	تعتبر عدد الساعات الممنوحة للطلاب كافية .
					C ₂	نقوم بشكل دوري (روتيني) بجمع المعلومات من الطلاب تتعلق بنوعية عملنا ومدى رضاهم عن الخدمات التي تقدمها الدائرة التي اعمل بها.
					C ₃	في حال عدم الرضى الطلاب بالخدمات المقدمة لهم نقوم بتصحيح الوضع مباشرة عن طريق الدائرة التي اعمل بها.
					C ₄	من السهل الاقتراب من او التحدث مع المسؤول عني والحصول على المعلومات للقيام بعملتي.
					C ₅	انا راض عن البنية التحتية للقسم .
					H ₁	يجب على ادارة الجامعة اعطاء بعض الاهتمام بفهم العلاقات والظروف الموجودة على ارض الواقع بين مختلف المستويات التنظيمية مثل الاقسام العلمية واعضاء هيئة التدريس .
					H ₂	الطلاب راضين عن مستوى اداء الخدمات التي يقدمها الجهاز الاداري للجامعة .
					H ₃	نسبة الطلاب الى اعضاء هيئة التدريس في مرحلة البكالوريوس تعتبر مرضية .

					نسبة عدد الطلاب الى اعضاء هيئة التدريس في مرحلتي الماجستير والدكتوراه تعتبر مرضية .	H ₄
					اوافق على تركيز الالهمية لقيمة الطاقم في الجامعة (اداري أو تدريسي) .	H ₅
					من الضروري اعتبار سلسلة القيم الممتدة في النظام الاداري مثل دور الفرد والمزوديين والمجتمع .	H ₆
					هل تعتقد ان جامعتك فيها نظام معلومات مناسب فيما يتعلق بالموارد البشرية .	H ₇
					انا راض عن عملي .	H ₈
					اعتقد ان راتبي مناسب .	H ₉
					لدي فرصة لتطوير وتحسين مهاراتي .	H ₁₀
					الاتصال الرسمي بزملائي في العمل يزودني بالمعلومات للقيام بعملتي .	H ₁₁
					الاجتماعات الجماعية تزودني بمعلومات مفيدة للقيام بعملتي (اللقاء الجماعي) .	H ₁₂
					انا راض عن الفرص المتاحة لي لزيادة المعرفة وتنمية مهاراتي في العمل .	H ₁₃
					تلقيت تدريب كافي لمعرفة اداء عملي .	H ₁₄
					طبيعة عملي تستفيد من مهاراتي وقدراتي .	H ₁₅

					H ₁₆	مديري في العمل شرح لي طبيعة اهداف وآلية عمل القسم واهميته للجامعة ككل .
					H ₁₇	مديري في العمل تحدثوا عن مدى تأثير التغييرات المستقبلية على اداء عملنا .
					H ₁₈	مديري في العمل يسمحوا للموظفين القيام بالعمل بشكل مستقل.
					H ₁₉	يشجع مديري في العمل الموظفين بعمل توصيات .
					H ₂₀	توجد فرص للعاملين الموهوبين (لديهم قدرات) من حيث رعايتهم .
					H ₂₁	يساهم مديري في العمل مع اعضاء الفريق لانجاز العمل المطلوب .
					H ₂₂	عندما نواجه مشكلة في العمل فإننا نتعاون ونطور اسلوب لحل المشكلة .
					H ₂₃	لدي هدف محدد لاقوم به في عملي .
					H ₂₄	لدى مديري تفهمهم واضح لما اقوم به من عمل .
					H ₂₅	طريقة ادائي لعملي (الدقة، الالتزام، الاستقلالية والنوعية) تحدد المزايا والحوافز الممنوحة .

الجزء - ب

1. هل تعرف شيئاً عن (بطاقة قياس الاداء)؟

☐ لا

☐ نعم

2. ما هي المؤشرات الواجب استخدامها لمساعدة الجامعة في سياستها المالية؟

(أ) زياده الدخل (ب) نقص التكاليف

(ج) أستخذتم الاملاك (د) خرى

3. ماهو معدل حياة الخدمات و المعدات والتسهيلات المقدمة في الجامعة هي :

(أ) اقل من سنتين (ب) من 2-4 سنوات (ج) من 4 - 6 سنوات

(د) اكثر من 6 سنوات (هـ) لا اعرف

4. ماهو معدل استخدام خدمات المكتبة (كتاب لكل طالب في الشهر)

(أ) اقل من 4 كتب (ب) من 2-4 كتب (ج) من 4 - 8 كتب

(د) من 8-12 كتاب (هـ) اكثر من 12 كتاب

5. ماهو معدل الابحاث المنشورة من قبل اعضاء هيئة التدريس في السنة

(أ) اقل من مقالين أو ورقتين (ب) من 2-4 مقالات (ج) من 4 - 6 مقالات

(د) من 4-10 مقالات (هـ) اكثر من 10 مقالات

6. هل تعتقد ان ادارة الجامعة يجب ان تحترم حواجز الاداء التقليدي؟

(أ) اعارض بقوة (ب) اعارض / غير موافق (ج) موافق

(د) اوافق بقوة (هـ) لا اعرف

7. ماهي نسبة الطلاب الاجانب المسجلين في الجامعة مقارنة بعدد الطلاب الكلي للجامعة ؟

(أ) أقل من 5% (ب) من 5%-10% (ج) من 10%-20%

(د) اكثر من 20% (هـ) لا اعرف

8. كم عدد المؤتمرات والحلقات والابحاث التي يتم تنظيمها في الجامعة كل سنة ؟

(أ) اقل من مؤتمرين (ب) من 2-4 مؤتمر (ج) من 4-10 مؤتمرات

(د) اكثر من 10 مؤتمرات (هـ) لا اعرف

9. ماهو معدل الابحاث المنشورة في مجلات ISI من قبل اعضاء هيئة التدريس في السنة ؟

(أ) أقل من بحثين (ب) من 2-4 أبحاث (ج) من 4-10 أبحاث

(د) أكثر من 10 أبحاث (هـ) لا أعرف

10. ماهو معدل الأبحاث المنشورة من قبل أعضاء هيئة التدريس في مجلات الأبحاث المحكمة في السنة ؟

(أ) أقل من بحثين (ب) من 2-4 أبحاث (ج) من 4-10 أبحاث

(د) أكثر من 10 أبحاث (هـ) لا أعرف

11. ما هي المؤشرات التي يستخدمها النظام الإداري لتقييم سياسة إدارة الجامعة ؟

(أ) الشهادات والخبرة المدرسين والاداريين

(ب) عن طريق رؤية الانجازات المقترحة من الموظفين

(ج) سهوله نظام المعلومات المستخدم

(د) عدد الاوراق البحثية التي تم نشرها

(هـ) عدد المنح المعطاه والمثبتة

12. ما هي المؤشرات التي يستخدمها النظام الإداري لتقييم رضا الطلاب ؟

(أ) تبادل التسويق (ب) عدد الطلاب

(ج) اقناع وقناعة الطلاب (د) تبديل الطلاب

13. ماهو عدد المواقع والبرامج المتوفرة على شبكة الانترنت في الجامعة ؟

(أ) أقل من موقعين (ب) من 2-4 مواقع

(ج) من 4 - 10 مواقع (د) أكثر من 10 مواقع

(هـ) لا أعرف

14. ماهو معدل رضى الطلاب عن الجامعة والتدريس فيها (مقياس 5-1)

15. ماهو معدل رضى أعضاء هيئة التدريس (مقياس 5-1)

16. ماهو عدد الشكاوي في الشهر ؟

(أ) أقل من شكوتين (ب) من 2-4 شكاوي (ج) من 4-10 شكاوي

(د) اكثر من 10 شكاوي (هـ) لا اعرف

17. كيف تترجم الجامعة نظام مقياس انجاز الاداء لموظفيها ؟

(أ) الكتيبات (ب) نشرات الاخبار (ج) مذكرات

(د) معلومات فصليه (هـ) لا اعرف

18. برأيك ما هي العيوب (النواقص) في نظام مقياس الاداء في الجامعة ؟

(أ) مقاييس كثيره جدا (ب) مقاييس قليله جدا (ج) لاتحتوي على المقاييس المناسبه

(د) لا يوجد عيوب (هـ) لا اعرف

اسم الجامعة: _____

كم لك في وظيفتك الحاليه: _____

عدد سنوات خبره : _____

مكان عملك : _____

الجنس : _____ العمر: _____

انتهت الإسله , شكراً جزيلاً لمشاركتك